

Engineering Data

SPLIT

- Cooling Only -

D-Series



Split - System Room Air Conditioners D - Series

Cooling Only	FT25DVM	R25DV1
	FT35DVM	R35DV1

1. Features	2
2. Power Supply	5
3. Functions.....	6
4. Specifications	7
5. Dimensions	8
5.1 Indoor Units	8
5.2 Outdoor Units	9
6. Wiring Diagrams.....	10
6.1 Indoor Units	10
6.2 Outdoor Units	11
7. Piping Diagrams.....	12
7.1 Indoor Units	12
7.2 Outdoor Units	13
8. Capacity Tables	14
8.1 Cooling Only.....	14
8.2 Capacity correction factor by the length of refrigerant piping (Reference)	16
9. Operation Limit.....	17
10. Sound Level	18
10.1 Measuring Location	18
10.2 Octave Band Level	19
11. Electric Characteristics.....	20
12. Installation Manual	21
13. Operation Manual.....	31
14. Optional Accessories	52
14.1 Option List	52
14.2 Installation Manual	53

Cautions




1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and choose an outdoor unit with anti-corrosion treatment.


1. Features

Features

< FT25/35DVM >




< R25/35DV1 >




Stylish Flat Design
Energy Saving
Quiet Operation
Wipe-clean Flat Panel
Healthy & Clean Functions
 Photocatalytic Deodorizing Function

05RAG04- 4




New Stylish Flat Design harmonizes with interiors and the simple design does not make you feel the existence of A/C in your room.


Sophisticated edge



Simple display



Straight line

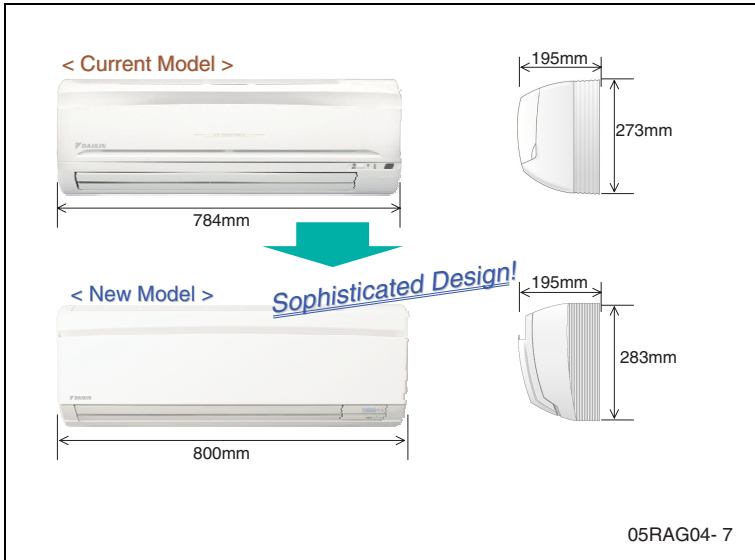


05RAG04- 5

Installation Example




05RAG04- 6




Wipe-clean

Grille Type :
 Remove and wash the grille

Current models are ... 

New Flat Panel : Easy to clean without removing the panel


New models are ... 

Also washable after removing the panel.

05RAG04- 9

Air-Purifying Filter with Photocatalytic Deodorizing Function

Double effect : Dust collecting & Deodorizing



- **Long Lasting Effect**
 No replacement required for 3 years with soaking in water once 6 months.
- **Needless to Expose to the Sun**
- **Active Component Regenerated by the Room Light**
 Material improvement makes it possible

05RAG04- 10

Compatibility

for 50Hz General

Indoor Unit \ Outdoor Unit		New	Current
		R25/35DV1	R25/35JV1
New	FT25/35DVM	○	×
Current	FT25/35BAVM	×	○

05RAG04- 16

2. Power Supply

Indoor Units	Outdoor Units	Power Supply
FT25DVM	R25DV1	1 ϕ , 220/240V, 50Hz
FT35DVM	R35DV1	

Notes: Power Supply Intake ; Outdoor Unit

3. Functions

Category	Functions	FT25-35DVM R25-35DV1	Category	Functions	FT25-35DVM R25-35DV1	
Basic Function	Inverter (with Inverter Power Control)	—	Health & Clean	Air Purifying Filter with Bacteriostatic, Virustatic Functions	—	
	Operation Limit for Cooling (°CDB)	19.4 ~46		Photocatalytic Deodorizing Filter	—	
	Operation Limit for Heating (°CWB)	—		Air Purifying Filter with Photocatalytic Deodorizing Function	○	
	PAM Control	—		Titanium Apatite Photocatalytic Air-Purifying Filter	—	
Compressor	Oval Scroll Compressor	—		Longlife Filter	—	
	Swing Compressor	—		Mold Proof Air Filter	○	
	Rotary Compressor	○		Wipe-clean Flat Panel	○	
	Reluctance DC Motor	—		Washable Grille	—	
Comfortable Airflow	Power-Airflow Flap	—		Mold Proof Operation	—	
	Power-Airflow Dual Flaps	○		Heating Dry Operation	—	
	Power-Airflow Diffuser	—		Good-Sleep Cooling Operation	—	
	Wide-Angle Louvers	○		Timer	24-Hour ON/OFF Timer	○
	Vertical Auto-Swing (Up and Down)	○			Night Set Mode	○
	Horizontal Auto-Swing (Right and Left)	—			Auto-Restart (after Power Failure)	○
	3-D Airflow	—			Self-Diagnosis (Digital, LED) Display	○ ★
	Comfort Airflow Mode	—		Worry Free “Reliability & Durability”	Wiring Error Check	—
3-Step Airflow (H/P Only)	—	Anticorrosion Treatment of Outdoor Heat Exchanger	○			
Comfort Control	Auto Fan Speed	○	Flexibility		Multi-Split / Split Type Compatible Indoor Unit	○
	Indoor Unit Silent Operation	—			Flexible Voltage Correspondence	—
	Night Quiet Mode (Automatic)	—			High Ceiling Application	—
	Outdoor Unit Silent Operation (Manual)	—			Chargeless	10m
	Intelligent Eye	—			Either Side Drain (Right or Left)	○
	Quick Warming Function	—			Power Selection	—
	Hot-Start Function	—		Remote Control	5-Rooms Centralized Controller (Option)	○
	Automatic Defrosting	—			Remote Control Adaptor (Normal Open-Pulse Contact)(Option)	○
Operation	Automatic Operation	—	Remote Control Adaptor (Normal Open Contact)(Option)		○	
	Programme Dry Function	○	DIII-NET Compatible (Adaptor)(Option)		—	
	Fan Only	○	Remote Controller	Wireless	○	
	Lifestyle Convenience	New Powerful Operation (Non-Inverter)		○	Wired	—
		Inverter Powerful Operation		—		
		Priority-Room Setting		—		
		Cooling / Heating Mode Lock	—			
		Home Leave Operation	—			
ECONO Mode		—				
Indoor Unit On/Off Switch		○				
Signal Reception Indicator		○				
Temperature Display	—					
Another Room Operation	—					

Notes: ○ : Holding Functions
— : No Functions

★ : Digital Only

4. Specifications

220/240V, 50Hz

Models	Indoor Units		FT25DVM	FT35DVM
	Outdoor Units		R25DV1	R35DV1
			Cooling	Cooling
Capacity		kW	2.62 / 2.62	3.58 / 3.58
		Btu/h	8,900 / 8,900	1,2200 / 1,2200
		kcal/h	2,250 / 2,250	3,050 / 3,050
Moisture Removal		L/h	1.2	1.9
Running Current		A	3.94 / 4.25	5.25 / 5.45
Power Consumption		W	815 / 880	1,120 / 1,190
Power Factor		%	94.0 / 86.3	92.2 / 91.0
COP		W/W	3.21 / 2.98	3.2 / 3.0
Piping Connections	Liquid	mm	φ 6.4	φ 6.4
	Gas	mm	φ 9.5	φ 12.7
	Drain	mm	φ18.0	φ18.0
Heat Insulation			Both Liquid and Gas Pipes	Both Liquid and Gas Pipes
Indoor Units			FT25DVM	FT35DVM
Front Panel Color			White	White
Air Flow Rate	m ³ /min (cfm)	H	8.8 (311)	9.9 (350)
		M	7.4 (261)	8.3 (293)
		L	5.9 (208)	6.8 (240)
Fan	Type		Cross Flow Fan	Cross Flow Fan
	Motor Output	W	18	18
	Speed	Steps	5 Steps, Auto	5 Steps, Auto
Air Direction Control			Right, Left, Horizontal, Downward	Right, Left, Horizontal, Downward
Air Filter			Removable / Washable / Mildew Proof	Removable / Washable / Mildew Proof
Running Current		A	0.17 / 0.15	0.19 / 0.17
Power Consumption		W	35 / 35	40 / 40
Power Factor		%	93.6 / 97.2	95.7 / 98.0
Temperature Control			Microcomputer Control	Microcomputer Control
Dimensions (HxWxD)		mm	283x800x195	283x800x195
Packaged Dimensions (HxWxD)		mm	265x855x340	265x855x340
Weight		kg	9	9
Gross Weight		kg	12	12
Operation Sound	H/L	dBA	36 / 28	39 / 31
Outdoor Units			R25DV1	R35DV1
Casing Color			Ivory White	Ivory White
Compressor	Type		Hermetically Sealed Rotary Type	Hermetically Sealed Rotary Type
	Model		RC30BV1R2T	RC46AV1TRT
	Motor Output	W	700	1,100
Refrigerant Oil	Type		SUNISO 4GSD.I.	SUNISO 4GSD.I.
	Charge	L	0.4	0.5
Refrigerant	Type		R22	R22
	Charge	kg	0.76	0.95
Air Flow Rate	m ³ /min		28 / 30	26.5 / 28
	cfm		988 / 1,059	935 / 988
Fan	Type		Propeller	Propeller
	Motor Output	W	25	25
Running Current		A	3.77 / 4.1	5.33 / 5.28
Power Consumption		W	780 / 845	1,080 / 1,150
Power Factor		%	94.0 / 85.9	92.1 / 90.8
Starting Current		A	19 / 21	26 / 28
Dimensions (HxWxD)		mm	560x695x265	560x695x265
Packaged Dimensions (HxWxD)		mm	599x797x310	599x797x310
Weight		kg	27	33
Gross Weight		kg	30	35
Operation Sound		dBA	H : 46 / 48	H : 48 / 49
Drawing No.			3D049542	3D049543

Notes:

- MAX. interunit piping length: 25m
- MAX. interunit height difference: 15m
- Amount of additional charge of refrigerant 20g/m for piping length exceeding 10m
- The data are based on the conditions shown in the table below.

Cooling	Piping Length
Indoor ; 27°CDB/19°CWB Outdoor ; 35°CDB/24°CWB	5m

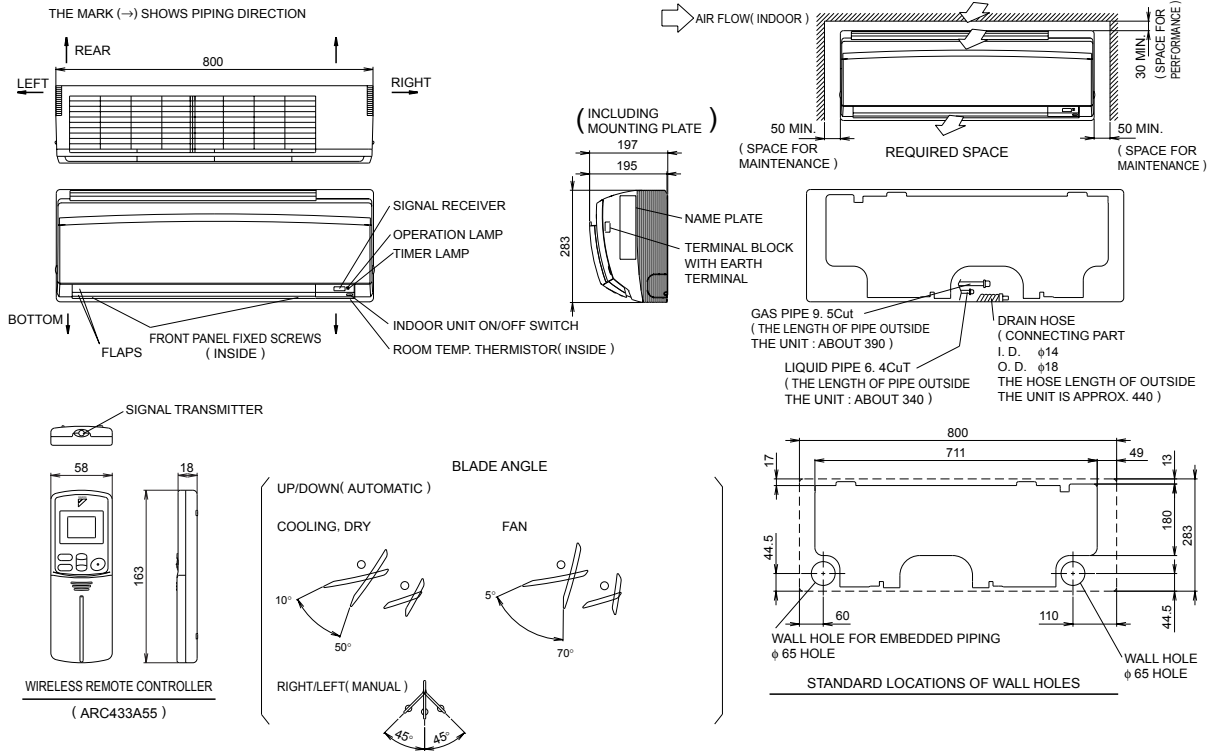
Conversion Formulae

kcal/h=kWx860
Btu/h=kWx3414
cfm=m³/minx35.3

5. Dimensions

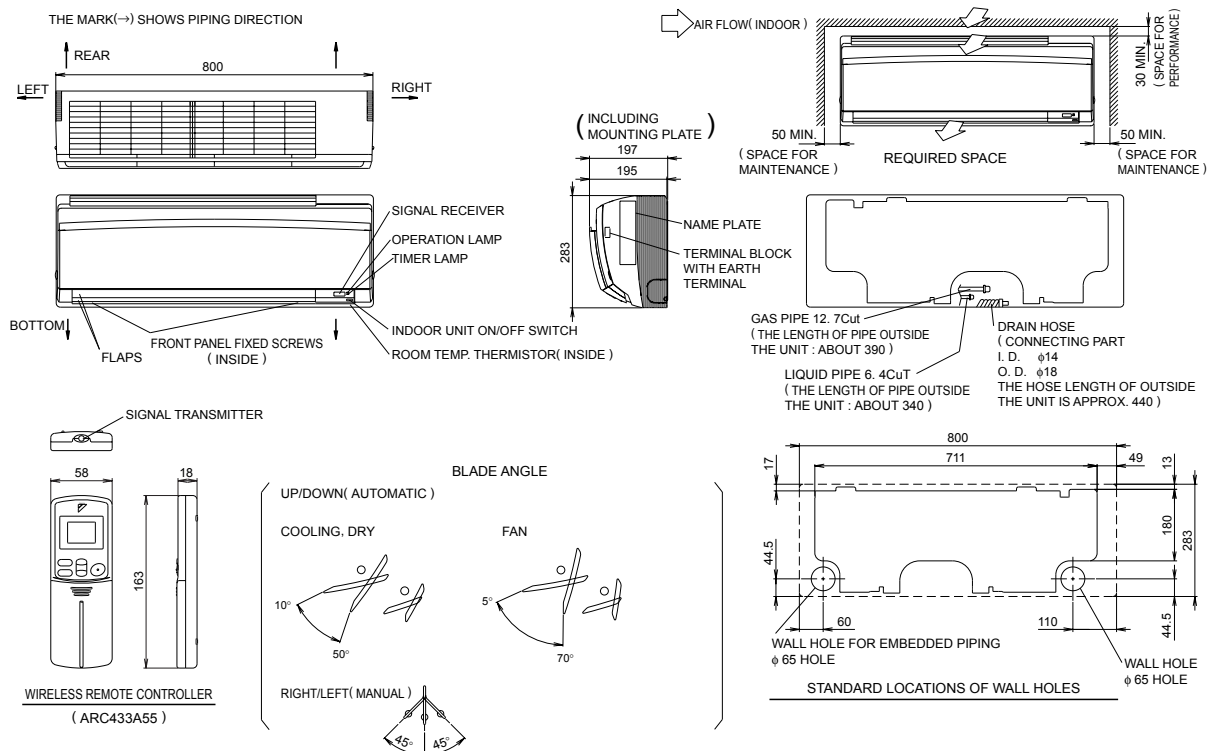
5.1 Indoor Units

FT25DVM



3D048857

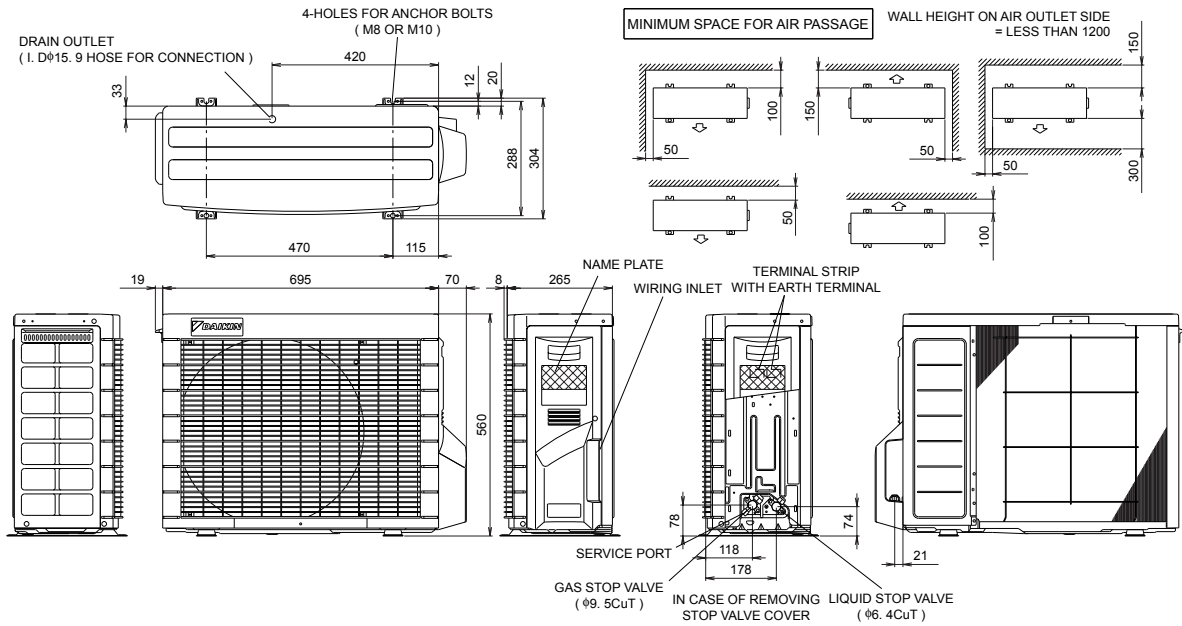
FT35DVM



3D047960B

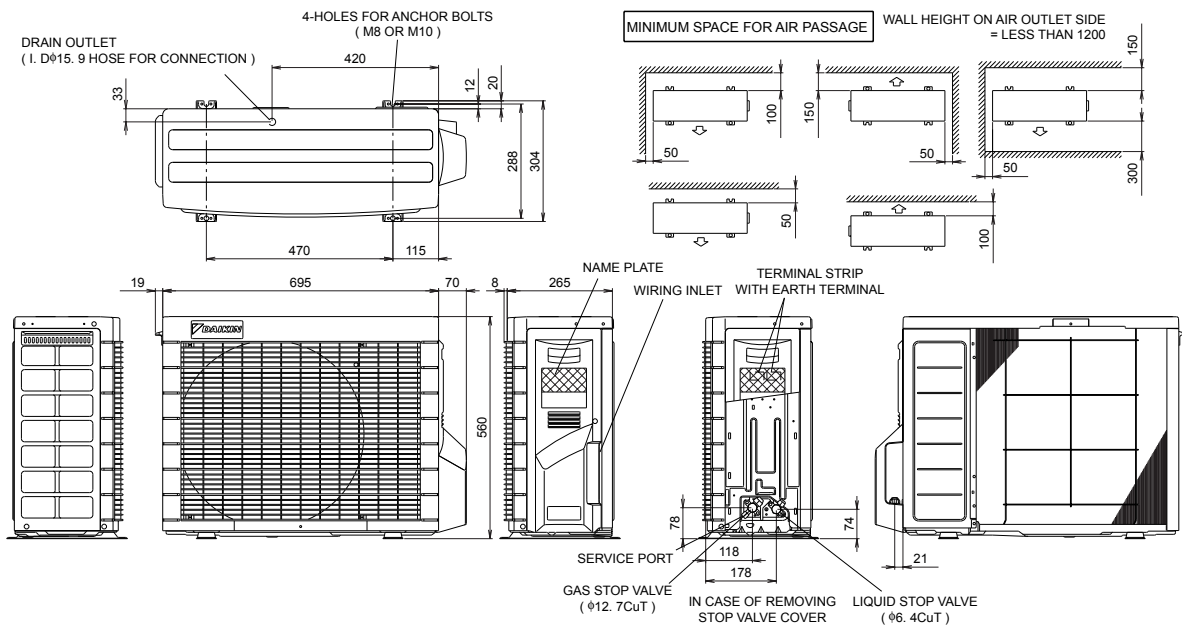
5.2 Outdoor Units

R25DV1



3D028041B

R35DV1

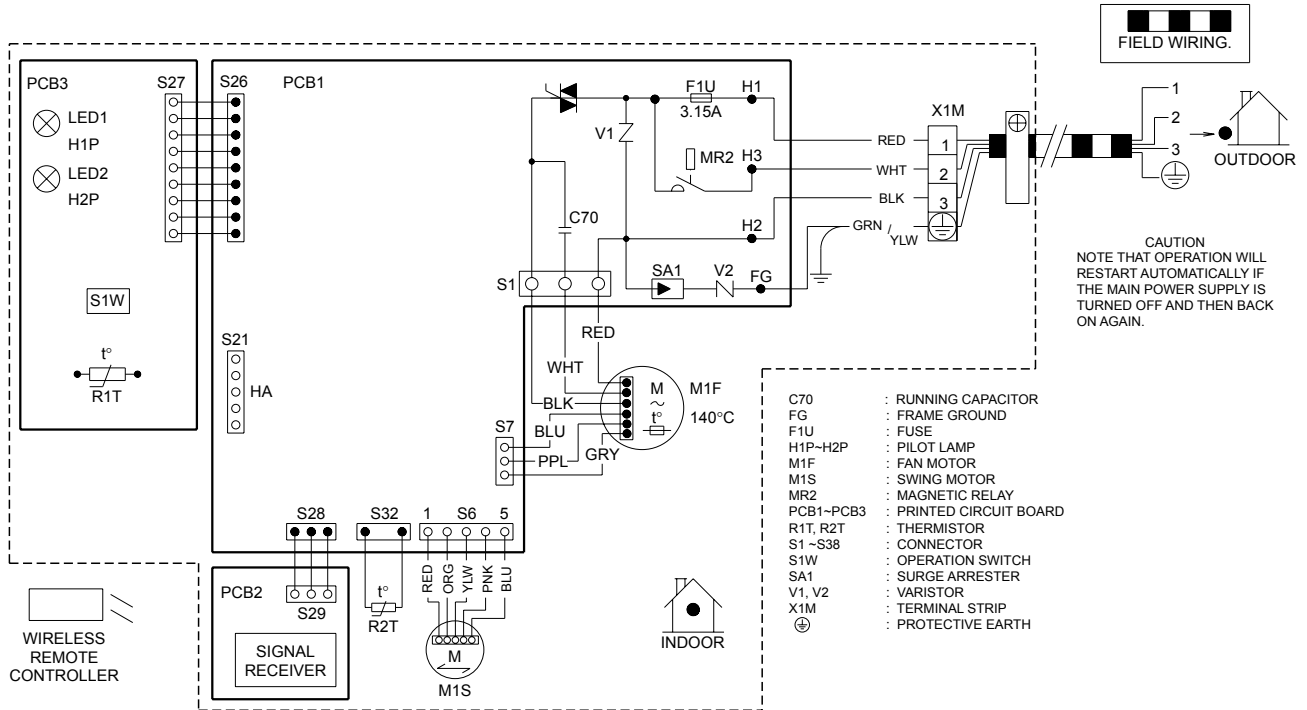


3D049408

6. Wiring Diagrams

6.1 Indoor Units

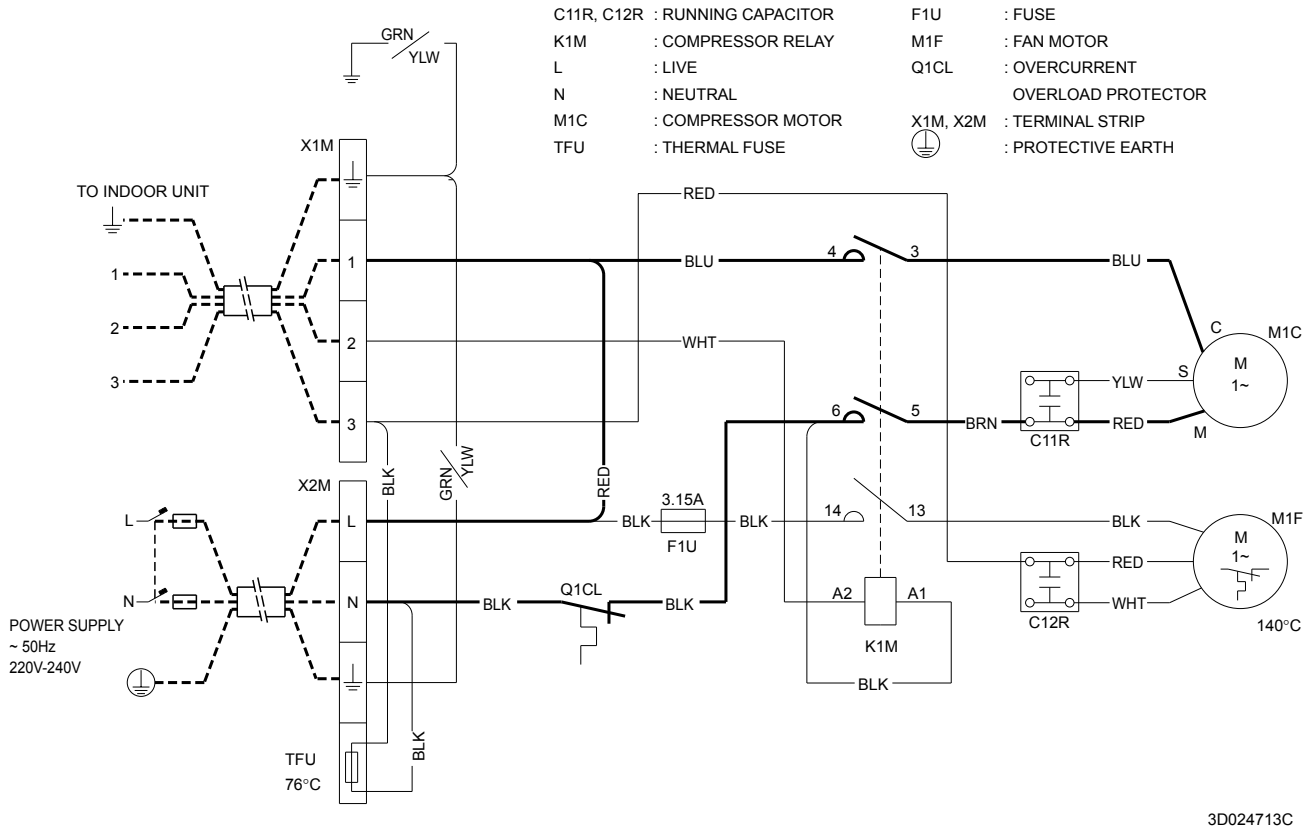
FT25DVM / FT35DVM



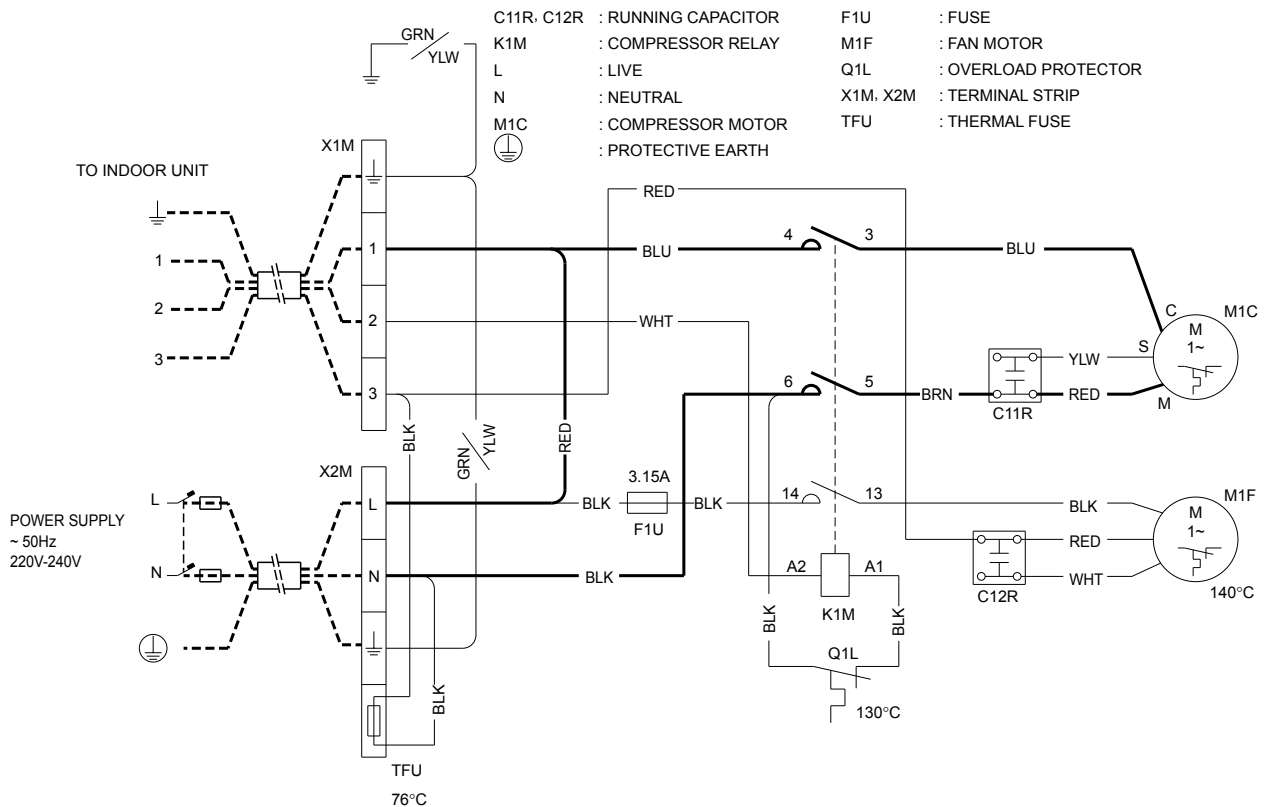
3D048861

6.2 Outdoor Units

R25DV1



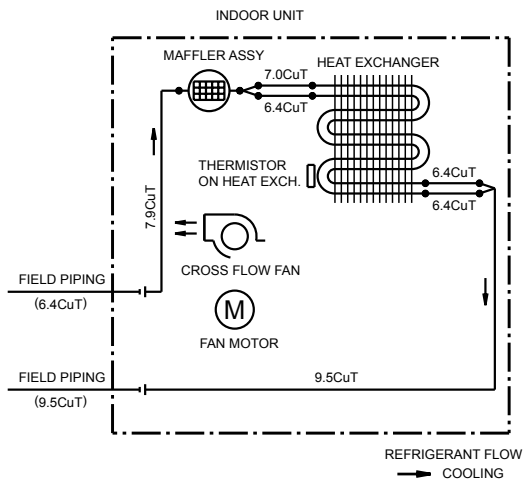
R35DV1



7. Piping Diagrams

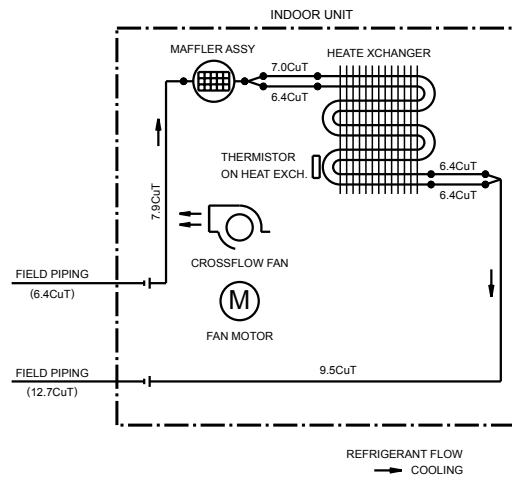
7.1 Indoor Units

FT25DVM



C : 4D047912A

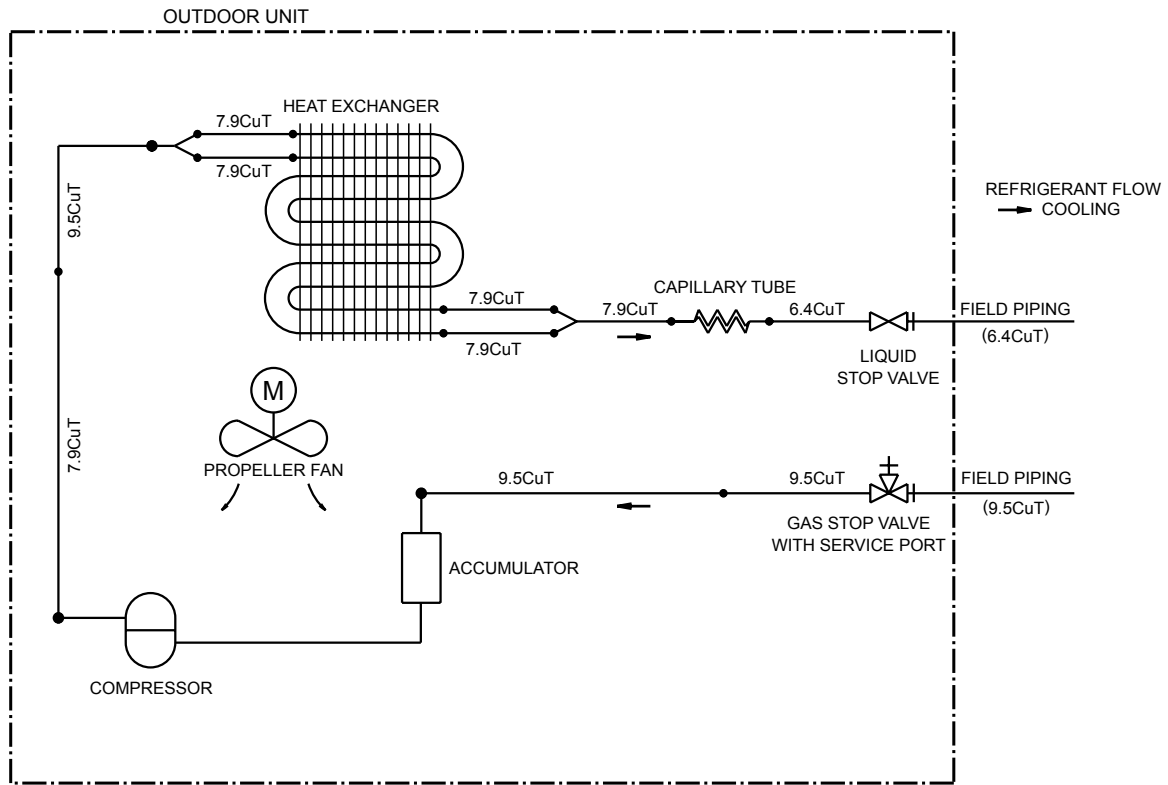
FT35DVM



C : 4D047913A

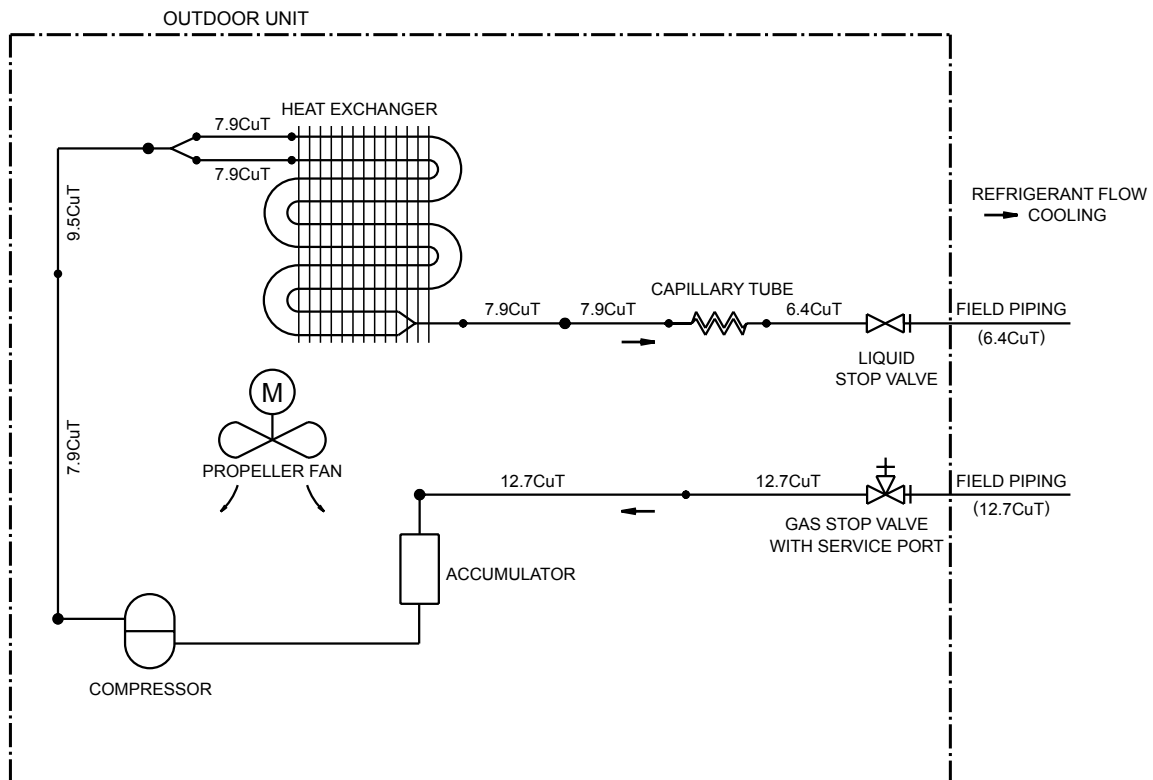
7.2 Outdoor Units

R25DV1



3D020878E

R35DV1



3D020877D

8. Capacity Tables

8.1 Cooling Only

FT25DVM+R25DV1

Cooling (220V 50Hz)

AFR	8.8
BF	0.24

INDOOR TEMP		OUTDOOR TEMPERATURE(°CDB)																		
		20			25			30			32			35			40			
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14.0	20	2.68	2.00	0.63	2.56	1.94	0.69	2.44	1.88	0.75	2.39	1.86	0.77	2.32	1.82	0.81	2.20	1.76	0.87	
16.0	22	2.80	1.97	0.63	2.68	1.91	0.69	2.56	1.85	0.75	2.51	1.83	0.77	2.44	1.80	0.81	2.32	1.74	0.87	
18.0	25	2.93	2.06	0.63	2.80	2.01	0.69	2.68	1.95	0.75	2.63	1.93	0.78	2.56	1.90	0.81	2.44	1.85	0.87	
19.0	27	2.99	2.17	0.63	2.86	2.12	0.69	2.74	2.07	0.75	2.69	2.05	0.78	2.62	2.02	0.82	2.50	1.97	0.88	
22.0	30	3.17	2.10	0.64	3.05	2.05	0.70	2.92	2.01	0.76	2.87	1.99	0.78	2.80	1.96	0.82	2.68	1.92	0.88	
24.0	32	3.29	2.04	0.64	3.17	2.00	0.70	3.04	1.96	0.76	2.99	1.94	0.79	2.92	1.92	0.82	2.80	1.88	0.88	

Cooling (240V 50Hz)

AFR	8.8
BF	0.24

INDOOR TEMP		OUTDOOR TEMPERATURE(°CDB)																		
		20			25			30			32			35			40			
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14.0	20	2.68	2.00	0.68	2.56	1.94	0.74	2.44	1.88	0.81	2.39	1.86	0.83	2.32	1.82	0.87	2.20	1.76	0.94	
16.0	22	2.80	1.97	0.68	2.68	1.91	0.74	2.56	1.85	0.81	2.51	1.83	0.84	2.44	1.80	0.87	2.32	1.74	0.94	
18.0	25	2.93	2.06	0.68	2.80	2.01	0.75	2.68	1.95	0.81	2.63	1.93	0.84	2.56	1.90	0.88	2.44	1.85	0.94	
19.0	27	2.99	2.17	0.68	2.86	2.12	0.75	2.74	2.07	0.81	2.69	2.05	0.84	2.62	2.02	0.88	2.50	1.97	0.95	
22.0	30	3.17	2.10	0.69	3.05	2.05	0.76	2.92	2.01	0.82	2.87	1.99	0.85	2.80	1.96	0.89	2.68	1.92	0.95	
24.0	32	3.29	2.04	0.69	3.17	2.00	0.76	3.04	1.96	0.82	2.99	1.94	0.85	2.92	1.92	0.89	2.80	1.88	0.95	

Symbols

AFR	: Air flow rate	(m ³ /min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C)
EDB	: Entering dry bulb temp.	(°C)
TC	: Total capacity	(kW)
SHC	: Sensible heat capacity	(kW)
PI	: Power input	(kW)

NOTES:

- Ratings shown are net capacities which include a deduction for indoor fan motor heat.
- shows nominal (rated) capacities and power input.
- TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
- SHC is based on each EWB and EDB.
 $SHC^* = SHC \text{ correction for other dry bulb.}$
 $= 0.02 \times AFR(m^3/min.) \times (1 - BF) \times (DB^* - EDB)$
 Add SHC* to SHC.
- Capacities are based on the following conditions.
 Corresponding refrigerant piping length : 5m
 Level difference : 0m
- Air flow rate (AFR) and bypass factor (BF) are tabulated above.

3D049930

FT35DVM+R35DV1

Cooling (220V 50Hz)

AFR	9.9
BF	0.24

INDOOR TEMP		OUTDOOR TEMPERATURE(°CDB)																		
		20			25			30			32			35			40			
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14.0	20	3.67	2.58	0.86	3.50	2.50	0.94	3.33	2.41	1.02	3.27	2.37	1.06	3.17	2.32	1.11	3.00	2.24	1.19	
16.0	22	3.83	2.54	0.86	3.67	2.46	0.95	3.50	2.37	1.03	3.43	2.34	1.06	3.33	2.29	1.11	3.17	2.21	1.20	
18.0	25	4.00	2.64	0.87	3.83	2.56	0.95	3.66	2.48	1.03	3.60	2.45	1.07	3.50	2.41	1.12	3.33	2.33	1.20	
19.0	27	4.08	2.76	0.87	3.91	2.68	0.95	3.75	2.61	1.04	3.68	2.58	1.07	3.58	2.54	1.12	3.41	2.47	1.20	
22.0	30	4.33	2.65	0.88	4.16	2.59	0.96	3.99	2.52	1.04	3.93	2.49	1.08	3.83	2.46	1.13	3.66	2.39	1.21	
24.0	32	4.49	2.58	0.88	4.33	2.51	0.97	4.16	2.45	1.05	4.09	2.43	1.08	3.99	2.40	1.13	3.83	2.34	1.22	

Cooling (240V 50Hz)

AFR	9.9
BF	0.24

INDOOR TEMP		OUTDOOR TEMPERATURE(°CDB)																		
		20			25			30			32			35			40			
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
°C	°C	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
14.0	20	3.67	2.58	0.91	3.50	2.50	1.00	3.33	2.41	1.09	3.27	2.37	1.12	3.17	2.32	1.18	3.00	2.24	1.26	
16.0	22	3.83	2.54	0.92	3.67	2.46	1.01	3.50	2.37	1.09	3.43	2.34	1.13	3.33	2.29	1.18	3.17	2.21	1.27	
18.0	25	4.00	2.64	0.92	3.83	2.56	1.01	3.66	2.48	1.10	3.60	2.45	1.13	3.50	2.41	1.19	3.33	2.33	1.28	
19.0	27	4.08	2.76	0.93	3.91	2.68	1.01	3.75	2.61	1.10	3.68	2.58	1.14	3.58	2.54	1.19	3.41	2.47	1.28	
22.0	30	4.33	2.65	0.93	4.16	2.59	1.02	3.99	2.52	1.11	3.93	2.49	1.15	3.83	2.46	1.20	3.66	2.39	1.29	
24.0	32	4.49	2.58	0.94	4.33	2.51	1.03	4.16	2.45	1.12	4.09	2.43	1.15	3.99	2.40	1.20	3.83	2.34	1.29	

Symbols

AFR	: Air flow rate	(m ³ /min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C)
EDB	: Entering dry bulb temp.	(°C)
TC	: Total capacity	(kW)
SHC	: Sensible heat capacity	(kW)
PI	: Power input	(kW)

NOTES:

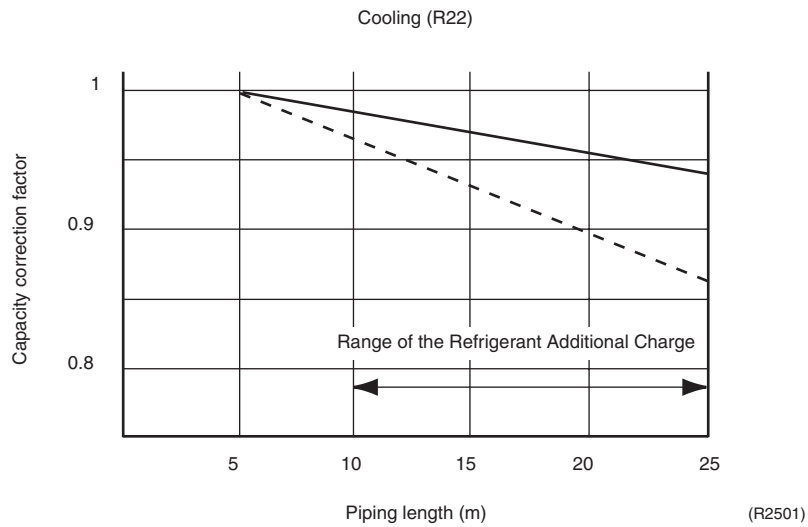
1. Ratings shown are net capacities which include a deduction for indoor fan motor heat.
2. **3.58** shows nominal (rated) capacities and power input.
3. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
4. SHC is based on each EWB and EDB.
 $SHC^* = SHC \text{ correction for other dry bulb.}$
 $= 0.02 \times AFR(m^3/min.) \times (1 - BF) \times (DB^* - EDB)$
 Add SHC* to SHC.
5. Capacities are based on the following conditions.
 Corresponding refrigerant piping length : 5m
 Level difference : 0m
6. Air flow rate (AFR) and bypass factor (BF) are tabulated above.

3D049931

8.2 Capacity correction factor by the length of refrigerant piping (Reference)

The cooling and the heating capacity of the unit has to be corrected in accordance with the length of refrigerant piping. (The distance between the indoor unit and the outdoor unit)

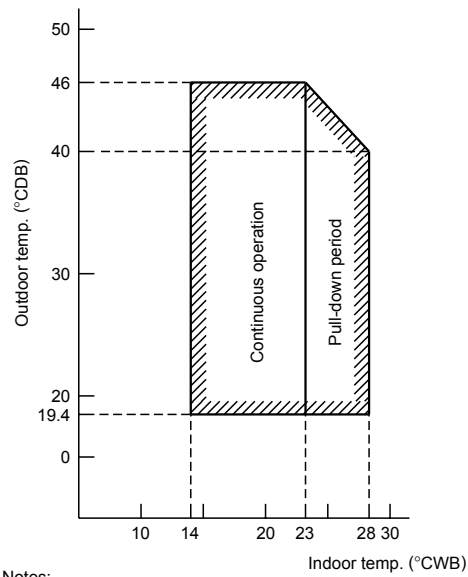
- **Split System** <— line : For the indoor unit with capacity of 2.5 kW. >
 <--- line : For the indoor unit with capacity of 3.5 kW. >



Notes: The graph shows the factor when additional refrigerant of the proper quantity is charged.

9. Operation Limit

R25DV1 / R35DV1

**Notes:**

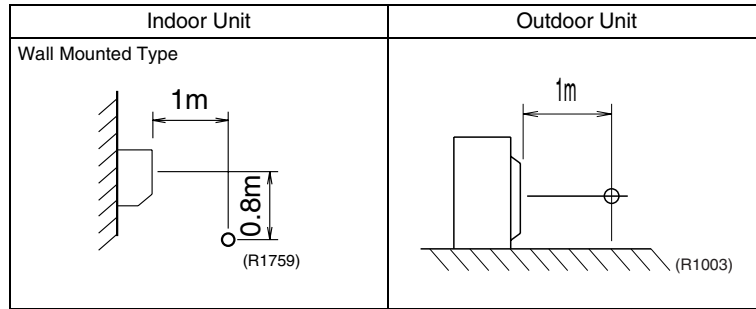
The graph is based on the following conditions.

- Equivalent piping length 5m
- Level difference 0m
- Air flow rate High

4D000888P

10. Sound Level

10.1 Measuring Location



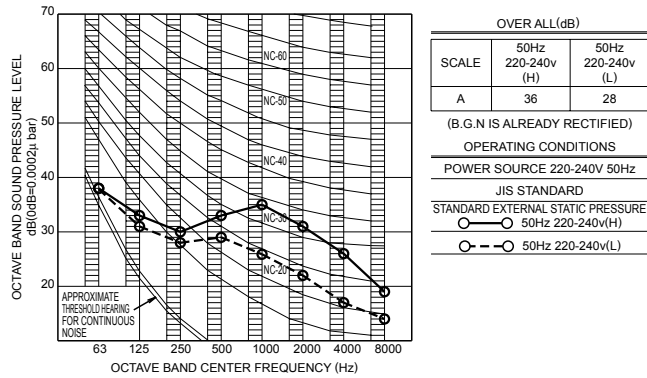
- Notes:**
1. Operation sound is measured in an anechoic chamber.
 2. The data are based on the conditions shown in the table below.

Cooling	Piping Length
Indoor ; 27°CDB/19°CWB Outdoor ; 35°CDB/24°CWB	5m

10.2 Octave Band Level

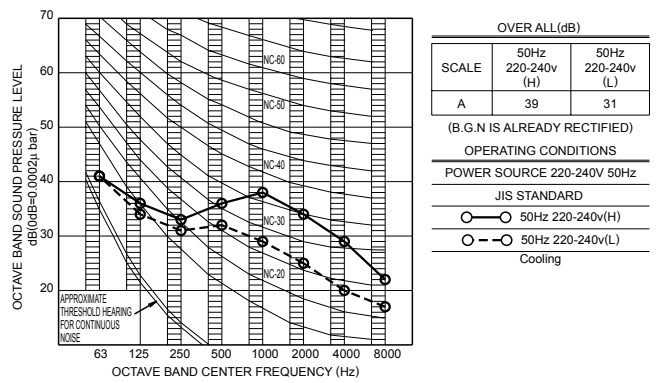
10.2.1 Indoor Units

FT25DVM



4D04821A

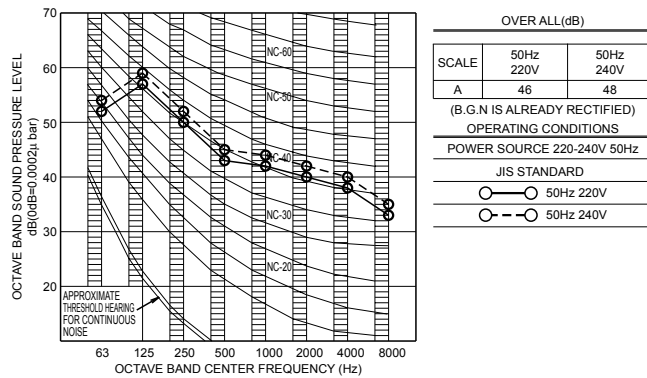
FT35DVM



4D048829

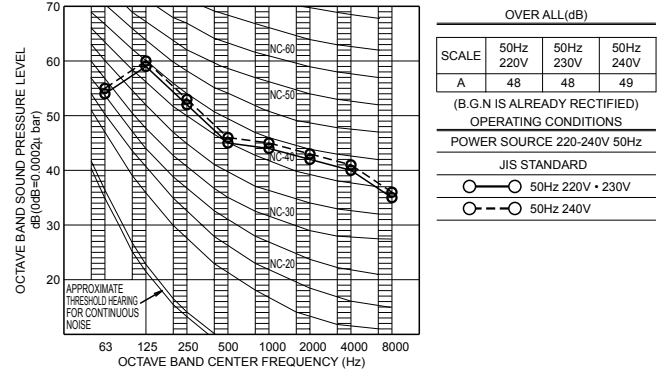
10.2.2 Outdoor Units

R25DV1



4D029157B

R35DV1



4D000697D

11. Electric Characteristics

			Power Supply			COMP		OFM		IFM	
Indoor Unit	Outdoor Unit	Hz-Volts	Voltage Range	MCA	MFA	LRA	RLA	W	FLA	W	FLA
FT25DVM	R25DV1	50-220	MAX. 50Hz 264V MIN. 50Hz 198V	4.7	15	19	3.4	25	0.27	18	0.16
		50-240		5.2		21	3.8				
FT35DVM	R35DV1	50-220	MAX. 50Hz 264V MIN. 50Hz 198V	6.7	15	26	5.0	25	0.27	18	0.16
		50-240		6.7		28	5.0				

SYMBOLS:

MCA : MIN. CIRCUIT AMPS (A)
 MFA : MAX. FUSE AMPS (A)
 LRA : LOCKED ROTOR AMPS (A)
 RLA : RATED LOAD AMPS (A)
 OFM : OUTDOOR FAN MOTOR
 IFM : INDOOR FAN MOTOR
 FLA : FULL LOAD AMPS (A)
 W : FAN MOTOR RATED OUTPUT (W)

NOTES:



1. RLA is based on the following conditions.
Indoor temp. 27°CDB/19°CWB
Outdoor temp. 35°CDB.
2. Maximum allowable voltage variation between phases is 2%.
3. Select wire size based on the larger value of MCA.
4. Instead of fuse, use circuit breaker.

3D049939
3D049940




12. Installation Manual

SAFETY PRECAUTIONS

- Read these Safety Precautions carefully to ensure correct installation.
- This manual classifies the precautions into WARNING and CAUTION.
Be sure to follow all the precautions below: they are all important for ensuring safety.




	WARNING	Failure to follow any of WARNING is likely to result in such grave consequences as death or serious injury.
	CAUTION	Failure to follow any of CAUTION may result in grave consequences in some cases.

- The following safety symbols are used throughout this manual:


	Be sure to observe this instruction.		Be sure to establish an earth connection.		Never attempt.
---	--------------------------------------	---	---	---	----------------

- After completing installation, test the unit to check for installation errors. Give the user adequate instructions concerning the use and cleaning of the unit according to the Operation Manual.

WARNING

- Installation should be left to the dealer or another professional. Improper installation may cause water leakage, electrical shock, or fire.
- Install the air conditioner according to the instructions given in this manual. Incomplete installation may cause water leakage, electrical shock, or fire.
- Be sure to use the supplied or specified installation parts. Use of other parts may cause the unit to come to lose, water leakage, electrical shock, or fire.
- Install the air conditioner on a solid base that can support the weight of the unit.
An inadequate base or incomplete installation may cause injury in the event the unit falls off the base.
- Electrical work should be carried out in accordance with the installation manual and the national electrical wiring rules or code of practice. Insufficient capacity or incomplete electrical work may cause electrical shock or fire.
- Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance.
- For wiring, use a cable length enough to cover the entire distance with no connection.
Do not use an extension cord. Do not put other loads on the power supply, use a dedicated power circuit.
(Failure to do so may cause abnormal heat, electrical shock or fire.)
- Use the specified types of wires for electrical connections between the indoor and outdoor units.
Firmly clamp the interconnecting wires so their terminals receive no external stresses. Incomplete connections or clamping may cause terminal overheating or fire.
- After connecting interconnecting and supply wiring be sure to shape the cables so that they do not put undue force on the electrical covers or panels. Install covers over the wires. Incomplete cover installation may cause terminal overheating, electrical shock, or fire.
- When installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than the specified refrigerant (R22), such as air. (Any presence of air or other foreign substance in the refrigerant circuit causes an abnormal pressure rise or rupture, resulting in injury.)
- The installation height from the floor must be over 1.8m.
- If any refrigerant has leaked out during the installation work, ventilate the room.
(The refrigerant produces a toxic gas if exposed to flames.) 
- After all installation is complete, check to make sure that no refrigerant is leaking out.
(The refrigerant produces a toxic gas if exposed to flames.) 
- During pump-down, stop the compressor before removing the refrigerant piping.
If the compressor is still running and the shut-off valve is open during pump-down, air will be sucked in when the refrigerant piping is removed, causing abnormal pressure in the freezer cycle which will lead to breakage and even injury.
- During installation, attach the refrigerant piping securely before running the compressor.
If the compressor is not attached and the shut-off valve is open during pump-down, air will be sucked in when the compressor is run, causing abnormal pressure in the freezer cycle which will lead to breakage and even injury.
- Be sure to establish an earth. Do not earth the unit to a utility pipe, arrester, or telephone earth.
Incomplete earth may cause electrical shock. A high surge current from lightning or other sources may cause damage to the air conditioner. 
- Be sure to install an earth leakage breaker. Failure to install an earth leakage breaker may result in electrical shocks.

CAUTION

- Do not install the air conditioner in a place where there is danger of exposure to inflammable gas leakage.
If the gas leaks and builds up around the unit, it may catch fire. 
- Establish drain piping according to the instructions of this manual. Inadequate piping may cause flooding.
- Tighten the flare nut according to the specified method such as with a torque wrench.
If the flare nut is tightened too hard, the flare nut may crack after a long time and cause refrigerant leakage.

ACCESSORIES

Indoor unit (A ~ L)

(A) Mounting plate	1	(E) Remote controller holder	1	(J) Insulation tape	1
(B) Mounting plate fixing screw M4 x 25L	6	(F) Fixing screw for remote controller holder M3 x 20L	2	(K) Operation manual	1
(C) Air purifying filter with photocatalytic deodorizing function	2	(G) AAA dry-cell batteries	2	(L) Installation manual	1
(D) Wireless remote controller	1	(H) Indoor unit fixing screw M4 x 12L	2		

CHOOSING A SITE

- Before choosing the installation site, obtain user approval.

Indoor unit

The indoor unit should be sited in a place where:

- the restrictions on installation specified in the indoor unit installation drawings are met,
- both air intake and exhaust have clear paths of air,
- the unit is not in the path of direct sunlight,
- the unit is away from the source of heat or steam,
- there is no source of machine oil vapour (this may shorten indoor unit life),
- cool air is circulated throughout the room,
- the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may shorten the remote controller range,
- the unit is at least 1 metre away from any television or radio set (unit may cause interference with the picture or sound)
- install at the recommended height (1.8m).

Outdoor unit

The outdoor unit should be sited in a place where:

- the restrictions on installation specified in the outdoor unit installation diagram are met,
- drain water causes no trouble or problem in particular,
- both air intake and exhaust have clear paths of air (they should be free of snow in snowy districts),
- the unit is in a clear path of air but not directly exposed to rain, strong winds, or direct sunlight,
- there is no fear of inflammable gas leakage,
- the unit is not directly exposed to salt, sulfidized gases, or machine oil vapour (they may shorten outdoor unit life).
- operation noise or hot air flow does not cause trouble to neighbours,
- the unit is at least 3 metres away from any television or radio antenna.

Wireless Remote Controller

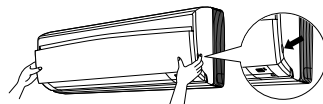
- Turn on all the fluorescent lamps in the room, if any, and find the site where remote control signals are properly received by the indoor unit (within 7 metres).

INSTALLATION TIPS

1. Removing and installing front panel.

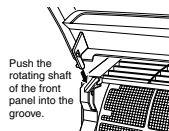
• Removal method

Hook fingers on the panel protrusions on the left and right of the main body, and open until the panel stops. Slide the front panel sideways to disengage the rotating shaft. Then pull the front panel toward you to remove it.



• Installation method

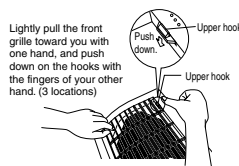
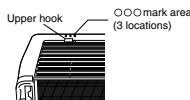
Align the tabs of the front panel with the grooves, and push all the way in. Then close slowly. Push the center of the lower surface of the panel firmly to engage the tabs.



2. Removing and installing front grille.

• Removal method

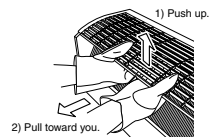
- 1) Remove front panel to remove the air filter.
- 2) Remove the front grille.
- 3) In front of the ○○○ mark of the front grille, there are 3 upper hooks. Lightly pull the front grille toward you with one hand, and push down on the hooks with the fingers of your other hand.



<When there is no work space because the unit is close to ceiling>

⚠ Caution

Be sure to wear protection gloves.



Place both hands under the center of the front grille, and while pushing up, pull it toward you.

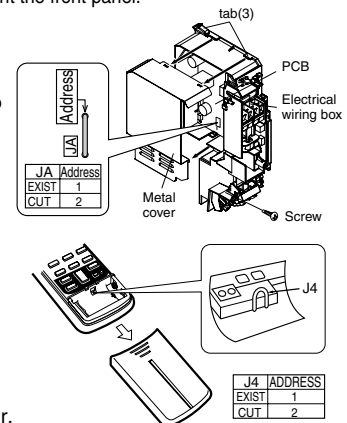
• Installation method

- 1) Install the front grille and firmly engage the upper hooks (3 locations).
- 2) Install 2 screws of the front grille.
- 3) Install the air filter and then mount the front panel.

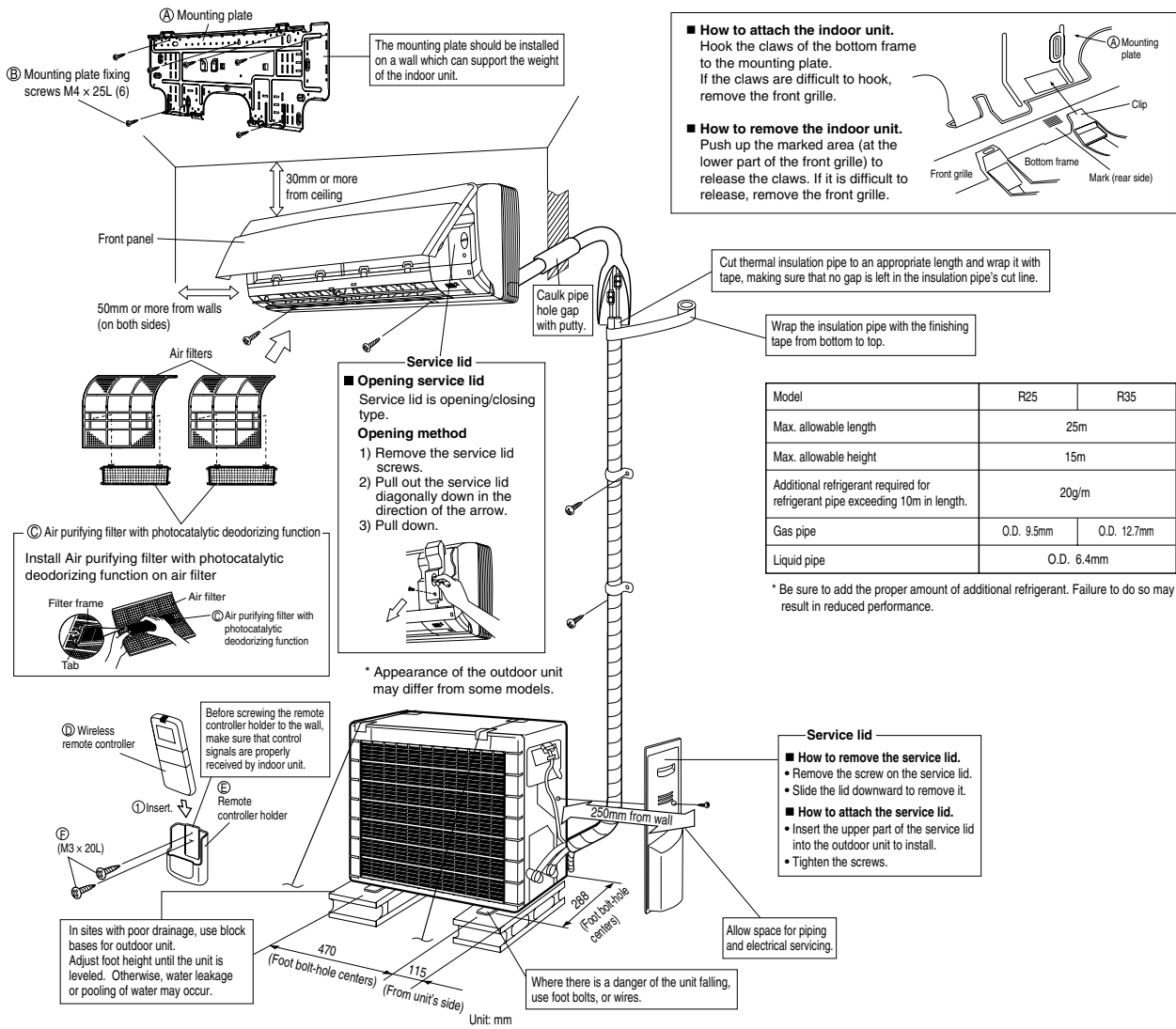
3. How to set the different addresses.

When two indoor units are installed in one room, the two wireless remote controllers can be set for different addresses.

- 1) Remove the front grille. (2 screws)
- 2) Remove the electrical wiring box. (1 screw)
- 3) Remove the metal plate electrical wiring cover. (3 tabs)
- 4) Cut the address jumper (JA) on the printed circuit board.
- 5) Cut the address jumper (J4) in the remote controller.



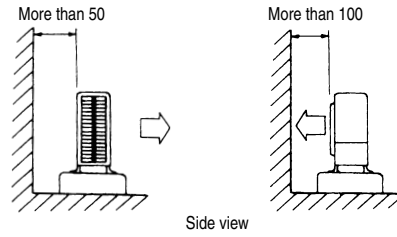
INDOOR/OUTDOOR UNIT INSTALLATION DRAWINGS



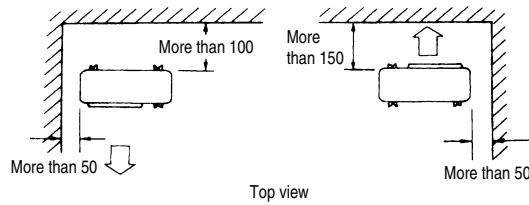
Outdoor Unit Installation Guidelines

- Where a wall or other obstacle is in the path of outdoor unit's intake or exhaust airflow, follow the installation guidelines below.

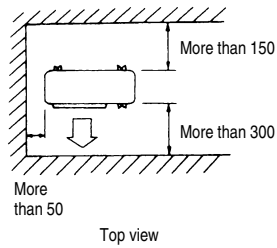
Wall facing one side



Walls facing two sides



Walls facing three sides



Unit: mm

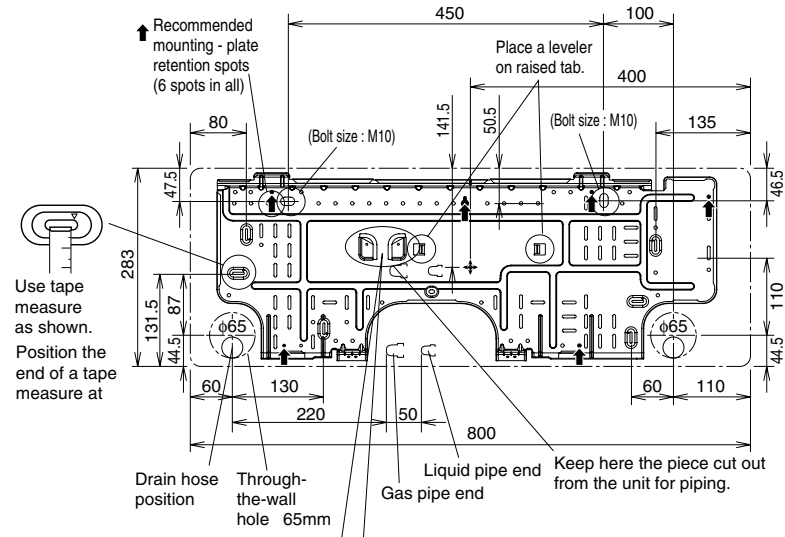
Indoor Unit

1

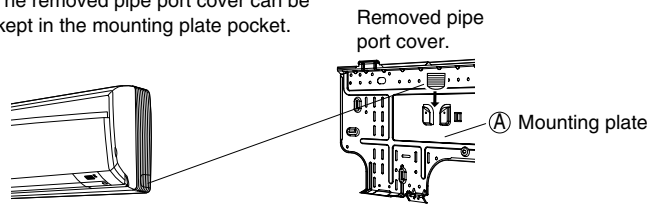
INSTALLING THE MOUNTING PLATE

- The mounting plate should be installed on a wall which can support the weight of the indoor unit.
 - Temporarily secure the mounting plate to the wall, make sure that the panel is completely level, and mark the boring points on the wall.
 - Secure the mounting plate to the wall with screws.

Recommended mounting-plate retention spots and Dimensions



* The removed pipe port cover can be kept in the mounting plate pocket.

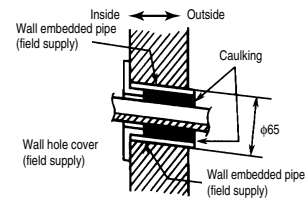


2

BORING A WALL HOLE AND INSTALLING WALL EMBEDDED PIPE

- For walls containing metal frame or metal board, be sure to use a wall embedded pipe and wall cover in the feed-through hole to prevent possible heat, electrical shock, or fire.
- Be sure to caulk the gaps around the pipes with caulking material to prevent water leakage.

- Bore a feed-through hole of 65mm in the wall so it has a down slope toward the outside.
- Insert a wall pipe into the hole.
- Insert a wall cover into wall pipe.
- After completing refrigerant piping, wiring, and drain piping, caulk pipe hole gap with putty.

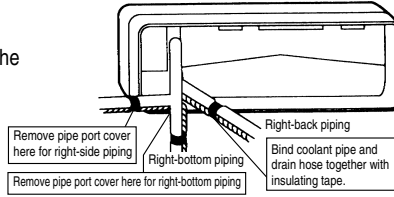


3

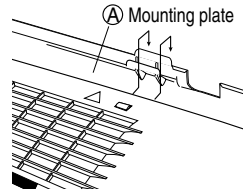
INSTALLING INDOOR UNIT

Right-Side, Right-Back, or Right-Bottom Piping

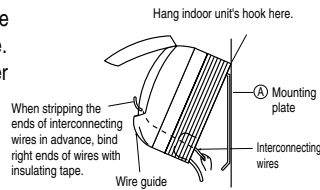
- (1) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.
- (2) Wrap the refrigerant pipes and drain hose together with insulation tape (J).



- (3) Pass the drain hose and refrigerant pipes through the wall hole, then set the indoor unit on the mounting plate hooks by using the Δ markings at the top of the indoor unit as a guide.

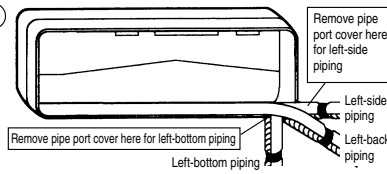


- (4) Open the front grille, then open the service lid. (Refer to INSTALLATION TIPS.)
- (5) Pass the interconnecting wires from the outdoor unit through the feed-through wall hole and then through the back of the indoor unit. Pull them through the front side. Bend the ends of tie wires upward in advance for easier work. (If the interconnecting wire ends are to be stripped first, bundle wire ends with adhesive tape.)
- (6) Press the indoor unit's bottom panel with both hands to set it on the mounting plate hooks. Make sure the wires do not catch on the edge of the indoor unit.

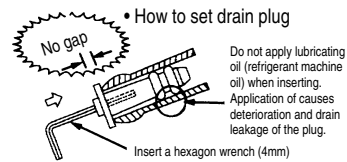


Left-Side, Left-Back, or Left Bottom Piping

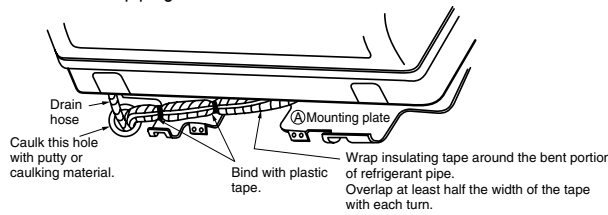
- (1) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.



- (2) Be sure to connect the drain hose to the drain port in place of a drain plug.

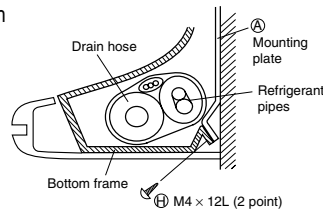


- (3) Shape the refrigerant pipe along the pipe path marking on the mounting plate.
- (4) Pass drain hose and refrigerant pipes through the wall hole, then set the indoor unit on mounting plate hooks, using the Δ markings at the top of indoor unit as a guide.
- (5) Pull in the interconnecting wires.
- (6) Connect the inter-unit piping.



Note:

- Wrap the refrigerant pipes and drain hose together with insulation tape as right figure, in case of setting the drain hose through the back of the indoor unit.
- While exercising care so that the interconnecting wires do not catch indoor unit, press the bottom edge of indoor unit with both hands until it is firmly caught by the mounting plate hooks. Secure indoor unit to the mounting plate with the screws (M4 x 12L).

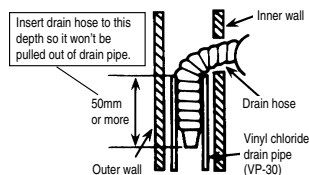


Wall Embedded Piping

Follow the instructions given under

Left-Side, Left-Back, or Left Bottom Piping

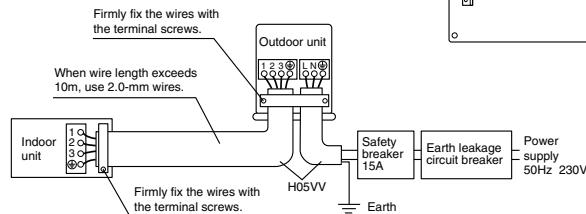
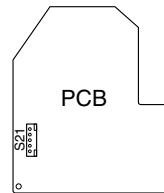
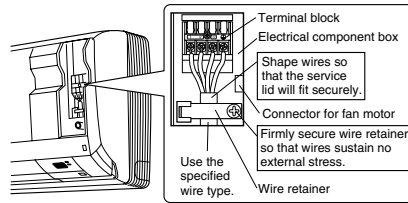
- Insert the drain hose to this depth so it won't be pulled out of the drain pipe.



4

WIRING

- 1) Strip wire ends (15mm).
- 2) Match wire colours with terminal numbers on indoor and outdoor unit's terminal blocks and firmly screw wires to the corresponding terminals.
- 3) Connect the earth wires to the corresponding terminals.
Attach the earth wire so that it is not connected to the fan motor connector.
- 4) Pull wires to make sure that they are securely latched up, then retain wires with wire retainer.
- 5) In case of connecting to an adapter system.
Run the remote controller cable and attach the S21 connector as the illustration right.
- 6) Shape the wires so that the service lid fits securely, then close service lid.



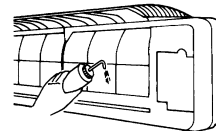
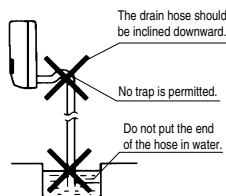
Warning

- 1) Do not use tapped wires, stand wires, extensioncords, or starburst connections, as they may cause overheating, electrical shock, or fire.
- 2) Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.

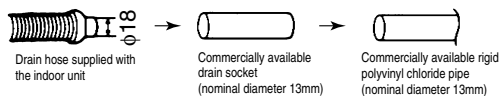
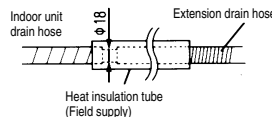
5

DRAIN PIPING

- Connect the drain hose, as described below.
- Remove the air filters and pour some water into the drain pan to check the water flows smoothly.



- When drain hose requires extension, obtain an extension hose commercially available. Be sure to thermally insulate the indoor section of the extension hose.
- When connecting a rigid polyvinyl chloride pipe (nominal diameter 13mm) directly to the drain hose attached to the indoor unit as with embedded piping work, use any commercially available drain socket (nominal diameter 13mm) as a joint.



Outdoor Unit

1 INSTALLING OUTDOOR UNIT

- For outdoor unit installation, see (CHOOSING A SITE), (Outdoor unit) and (INDOOR/OUTDOOR UNIT INSTALLATION DRAWINGS).

2 FLARING THE PIPE END

- Cut the pipe end with a pipe cutter.
- Remove burrs with the cut surface facing downward so that the chips do not enter the pipe.
- Put the flare nut on the pipe.
- Flare the pipe.
- Check that the flaring is properly made.

Warning

Incomplete flaring may cause refrigerant gas leakage.

Flaring
Set exactly at the position shown below.

	A
RIGID	0.5mm
IMPERIAL	1.0mm

Check
The pipe end must be evenly flared in a perfect circle. Make sure that the flare nut is fitted.

3 REFRIGERANT PIPING

- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand. Then tighten them fully with the torque wrenches.
 - Use torque wrenches when tightening the flare nuts to prevent damage to the flare nuts and escaping gas.
- To prevent gas leakage, apply refrigeration machine oil on both inner and outer surfaces of the flare.

Flare nut tightening torque		
Gas side		Liquid side
3/8 inch	1/2 inch	1/4 inch
32.7-39.9N•m (333-407kgf•cm)	49.5-60.3N•m (505-615kgf•cm)	14.2-17.2N•m (144-175kgf•cm)

Valve cap tightening torque		
Gas side		Liquid side
3/8 inch	1/2 inch	1/4 inch
21.6-27.4N•m (220-280kgf•cm)	26.5-32.3N•m (270-330kgf•cm)	21.6-27.4N•m (220-280kgf•cm)

Service port cap tightening torque | 10.8-14.7N•m (110-150kgf•cm)

Cautions on Pipe Handling

- Protect the open end of the pipe against dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending. (Bending radius should be 30 to 40mm or larger.)

Be sure to place a cap.

If no flare cap is available, cover the flare mouth with tape to keep dirt or water out.

Selection of Copper and Heat Insulation materials

When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam
Heat transfer rate: 0.041 to 0.052kW/mK (0.035 to 0.045kcal/mh°C)
Refrigerant gas pipe's surface temperature reaches 110°C max.
Choose heat insulation materials that will withstand this temperature.
- Be sure to insulate both the gas and liquid piping and to provide insulation dimensions as below.

Gas side		Liquid side	Gas pipe thermal insulation		Liquid pipe thermal insulation
25 class	35 class		25 class	35 class	
O.D. 9.5mm	O.D. 12.7mm	O.D. 6.4mm	I.D. 12-15mm	I.D. 14-16mm	I.D. 8-10mm
Thickness 0.8mm		Thickness 0.8mm	Thickness 10mm Min.		

- Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

4 PURGING AIR AND CHECKING GAS LEAKAGE

Warning

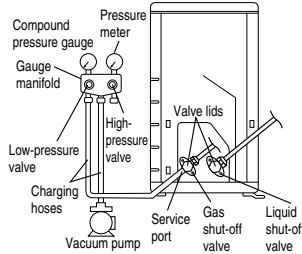
Do not mix any substance other than the specified refrigerant (R22) into the refrigeration cycle.

Warning

If refrigerant gas leaks during air purging, ventilate the room as soon as possible.

To prevent air pollution, a vacuum pump should be used for air purging wherever possible.

- If using additional refrigerant, perform air purging from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (4mm) to operate the shut-off valve.
- All refrigerant pipe joints should be tightened with a torque wrench at the specified tightening torque.



*1. Pipe length vs. vacuum pump run time

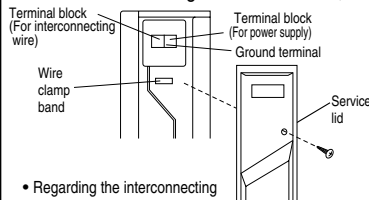
Pipe length	Up to 15 metres	More than 15 metres
Run time	Not less than 10 min.	Not less than 15 min.

*2. If the compound pressure gauge pointer swings back, refrigerant may have water content or a loose pipe joint may exist. Check all pipe joints and retighten nuts as needed, then repeat steps (2) through (4).

- (1) Connect projection side (on which worm pin is pressed) of charging hose (which comes from gauge manifold) to gas shut-off valve's service port.
- (2) Fully open gauge manifold's low-pressure valve (Lo) and completely close its high-pressure valve (Hi). (High-pressure valve subsequently requires no operation.)
- (3) Do vacuum pumping and make sure that the compound pressure gauge reads -0.1MPa (-76cmHg)*1.
- (4) Close gauge manifold's low-pressure valve (Lo) and stop vacuum pump. (Keep this state for a few minutes to make sure that the compound pressure gauge pointer does not swing back.)*2.
- (5) Remove covers from liquid shut-off valve and gas shut-off valve.
- (6) Turn the liquid shut-off valve's rod 90 degrees counterclockwise with a hexagonal wrench to open valve. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.
- (7) Disconnect charging hose from gas shut-off valve's service port, then fully open liquid and gas shut-off valves. (Do not attempt to turn valve rod beyond its stop.)
- (8) Tighten valve lids and service port caps for the liquid and gas shut-off valves with a torque wrench at the specified torques.

5 WIRING

- For interconnecting wire connections, see **INDOOR UNIT**, **4 WIRING**.



- Regarding the interconnecting and power cables.

Warning! Never use short cables for connecting end of conductor to each other.

- How to tighten the screws on the terminal block.
 - Bare the ends of the electric wires.

Bare wires up to here



If the wire is bared too much, electric leakage shock occur.



- After retaining the wires, check that all the terminal screws are firmly tightened.
- Don't connect together two wires on one terminal.

(1 wire - 1 terminal)



6

DRAIN WORK

- If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 30mm in height under the outdoor unit's feet.
- In cold areas, do not use a drain hose with the outdoor unit. (Otherwise, drain water may freeze.)

TRIAL OPERATION AND TESTING

Trial Operation and Testing

- (1) Measure the supply voltage and make sure that it falls in the specified range.
- (2) Trial operation should be carried out in cooling mode.

Trial operation from Remote Controller

- (1) Press ON/OFF button to turn on the system.
- (2) Simultaneously press center of TEMP button and MODE button.
- (3) Press MODE button twice.
("T" will appear on the display to indicate that Trial Operation mode is selected.)
- (4) Trial run mode terminates in approx. 30 minutes and switches into normal mode. To quit a trial operation, press ON/OFF button.

Select the lowest programmable temperature.

- Trial operation in cooling mode may be disabled depending on the room temperature. Use the remote controller for trial operation as described below.
- After trial operation is complete, set the temperature to a normal level (26° to 28° C).
- For protection, the unit disables restart operation for 3 minutes after it is turned off.

(3) Carry out the test operation in accordance with the Operation Manual to ensure that all functions and parts, such as louver movement, are working properly.

- * The air conditioner requires a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- * If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is opened again.

Test Items



Test Items	Symptom (diagnostic display on RC)	Check
Indoor and outdoor units are installed properly on solid bases.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly earthed.	Electrical leakage	
The specified wires are used for interconnecting wire connections.	Inoperative or burn damage	
Indoor or outdoor unit's air intake or exhaust has clear path of air. Shut-off valves are opened.	Incomplete cooling function	
Indoor unit properly receives remote controller commands.	Inoperative	

3P153869-2B

13. Operation Manual

Safety precaution

- Keep this manual where the operator can easily find them.
- Read this manual attentively before starting up the unit.
- For safety reason the operator must read the following cautions carefully.
- This manual classifies precautions into WARNING and CAUTION. Be sure to follow all precautions below: they are all important for ensuring safety.

 WARNING If you do not follow these instructions exactly, the unit may cause property damage, personal injury or loss of life.	 CAUTION If you do not follow these instructions exactly, the unit may cause minor or moderate property damage or personal injury.
---	--



Never do.



Be sure to earth the air conditioner.



Never touch the air conditioner (including the remote controller) with a wet hand.




Be sure to follow the instructions.




Never cause the air conditioner (including the remote controller) to get wet.





WARNING

- In order to avoid fire, explosion or injury, do not operate the unit when harmful, among which flammable or corrosive gases, are detected near the unit. 
- It is not good for health to expose your body to the air flow for a long time.
- Do not put a finger, a rod or other objects into the air outlet or inlet. As the fan is rotating at a high speed, it will cause injury.
- Do not attempt to repair, relocate, modify or reinstall the air conditioner by yourself. Incorrect work will cause electric shocks, fire etc.
For repairs and reinstallation, consult your Daikin dealer for advice and information.


- The refrigerant used in the air conditioner is safe. Although leaks should not occur, if for some reason any refrigerant happens to leak into the room, make sure it does not come in contact with any flame as of gas heaters, kerosene heaters or gas range. 
- If the air conditioner is not cooling properly, the refrigerant may be leaking, so call your dealer. When carrying out repairs accompanying adding refrigerant, check the content of the repairs with our service staff.
- Do not attempt to install the air conditioner by your self. Incorrect work will result in water leakage, electric shocks or fire. For installation, consult the dealer or a qualified technician.
- In order to avoid electric shock, fire or injury, if you detect any abnormality such as smell of fire, stop the operation and turn off the breaker. And call your dealer for instructions.





CAUTION

- The air conditioner must be earthed. Incomplete earthing may result in electric shocks. Do not connect the earth line to a gas pipe, water pipe, lightning rod, or a telephone earth line. 
- In order to avoid any quality deterioration, do not use the unit for cooling precision instruments, food, plants, animals or works of art. 
- Never expose little children, plants or animals directly to the air flow.
- Do not place appliances which produce open fire in places exposed to the air flow from the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not block air inlets nor outlets. Impaired air flow may result in insufficient performance or trouble.

- Do not stand or sit on the outdoor unit. Do not place any object on the unit to avoid injury, do not remove the fan guard.
- Do not place anything under the indoor or outdoor unit that must be kept away from moisture. In certain conditions, moisture in the air may condense and drip.
- After a long use, check the unit stand and fittings for damage.
- Do not touch the air inlet and aluminum fins of outdoor unit. It may cause injury.
- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the appliance.

- To avoid oxygen deficiency, ventilate the room sufficiently if equipment with burner is used together with the air conditioner. 
- Before cleaning, be sure to stop the operation, turn the breaker off or pull out the supply cord.
- Do not connect the air conditioner to a power supply different from the one as specified. It may cause trouble or fire.
- Depending on the environment, an earth leakage breaker must be installed. Lack of an earth leakage breaker may result in electric shocks.
- Arrange the drain hose to ensure smooth drainage. Incomplete draining may cause wetting of the building, furniture etc.

- Do not operate the air conditioner with wet hands. 

- Do not wash the indoor unit with excessive water, only use a slightly wet cloth.
- Do not place things such as vessels containing water or anything else on top of the unit. Water may penetrate into the unit and degrade electrical insulations, resulting in an electric shock. 

Installation site.

- To install the air conditioner in the following types of environments, consult the dealer.
 - Places with an oily ambient or where steam or soot occurs.
 - Salty environment such as coastal areas.
 - Places where sulfide gas occurs such as hot springs.
 - Places where snow may block the outdoor unit.

The drain from the outdoor unit must be discharged to a place of good drainage.

Consider nuisance to your neighbours from noises.

- For installation, choose a place as described below.
 - A place solid enough to bear the weight of the unit which does not amplify the operation noise or vibration.
 - A place from where the air discharged from the outdoor unit or the operation noise will not annoy your neighbours.

Electrical work.

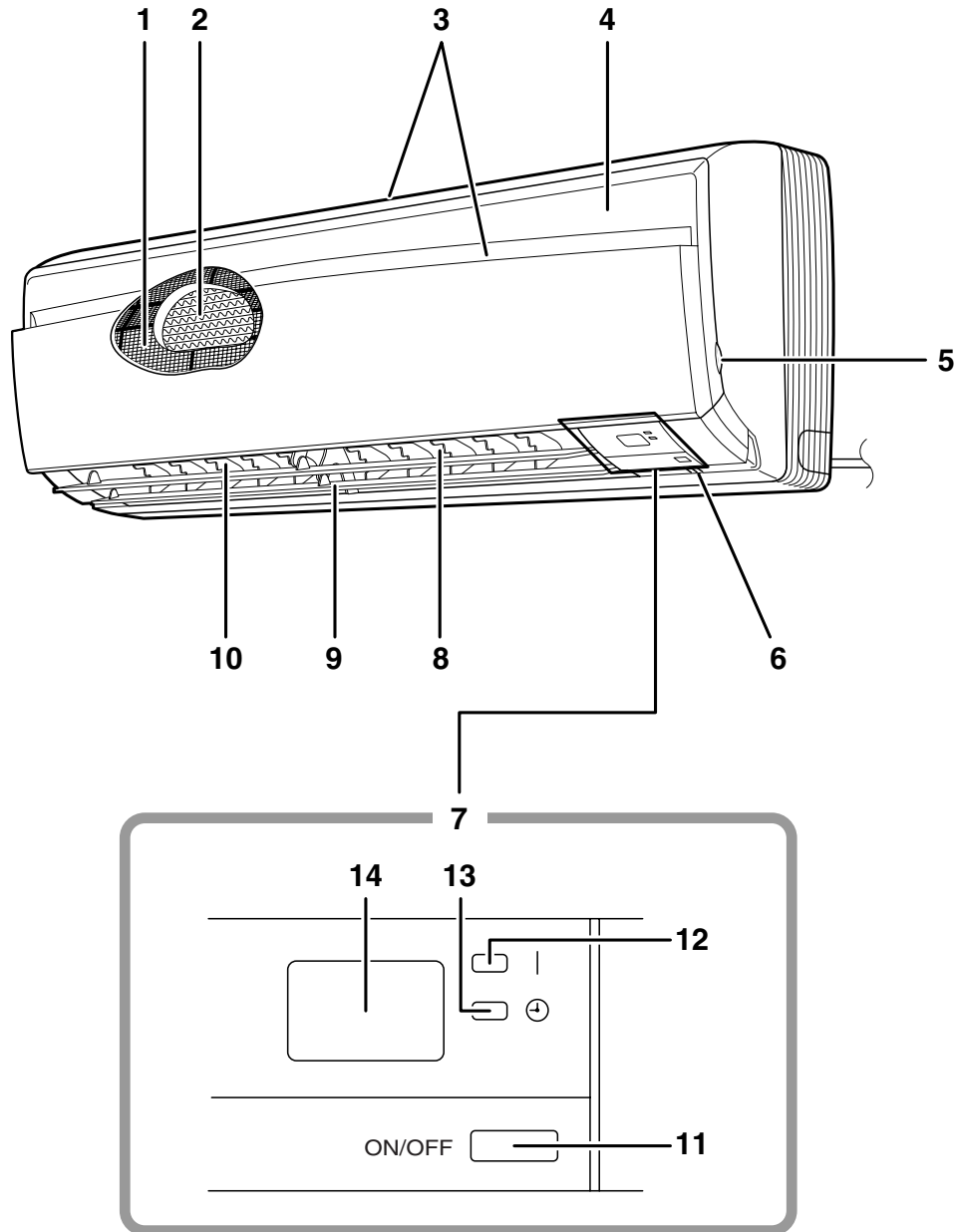
- For power supply, be sure to use a separate power circuit dedicated to the air conditioner.

System relocation.

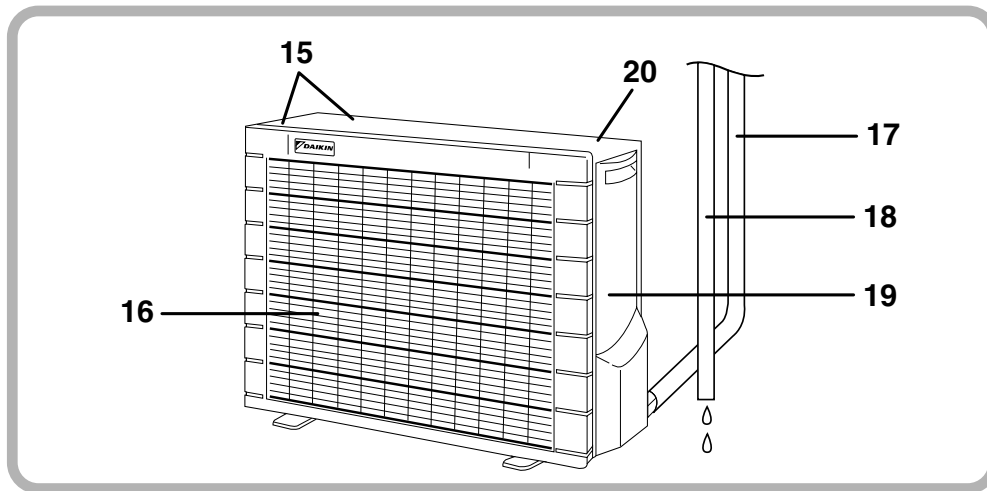
- Relocating the air conditioner requires specialized knowledge and skills. Please consult the dealer if relocation is necessary for moving or remodeling.

Names of parts

■ Indoor Unit



■ Outdoor Unit



■ Indoor Unit

1. Air filter
2. Air purifying filter with photocatalytic deodorizing function:
 - These filters are attached to the inside of the air filters.
3. Air inlet
4. Front panel
5. Panel tab
6. Room temperature sensor:
 - It senses the air temperature around the unit.
7. Display
8. Air outlet
9. Flaps (horizontal blades): (page 12.)
10. Louvers (vertical blades):
 - The louvers are inside of the air outlet. (page 13.)

11. Indoor Unit ON/OFF switch: (page 10.)

- Push this switch once to start operation. Push once again to stop it.
- The operation mode refers to the following table.

Mode	Temperature setting	Air flow rate
COOL	22°C	AUTO

- This switch is useful when the remote controller is missing.

12. Operation lamp (green)

13. TIMER lamp (yellow): (page 15.)

14. Signal receiver:

- It receives signals from the remote controller.
- When the unit receives a signal, you will hear a short beep.
 - Operation startbeep-beep
 - Settings changedbeep
 - Operation stopbeeeeeep

■ Outdoor Unit

15. Air inlet: (Back and side)
16. Air outlet
17. Refrigerant piping and inter-unit cable
18. Drain hose

19. Earth terminal:

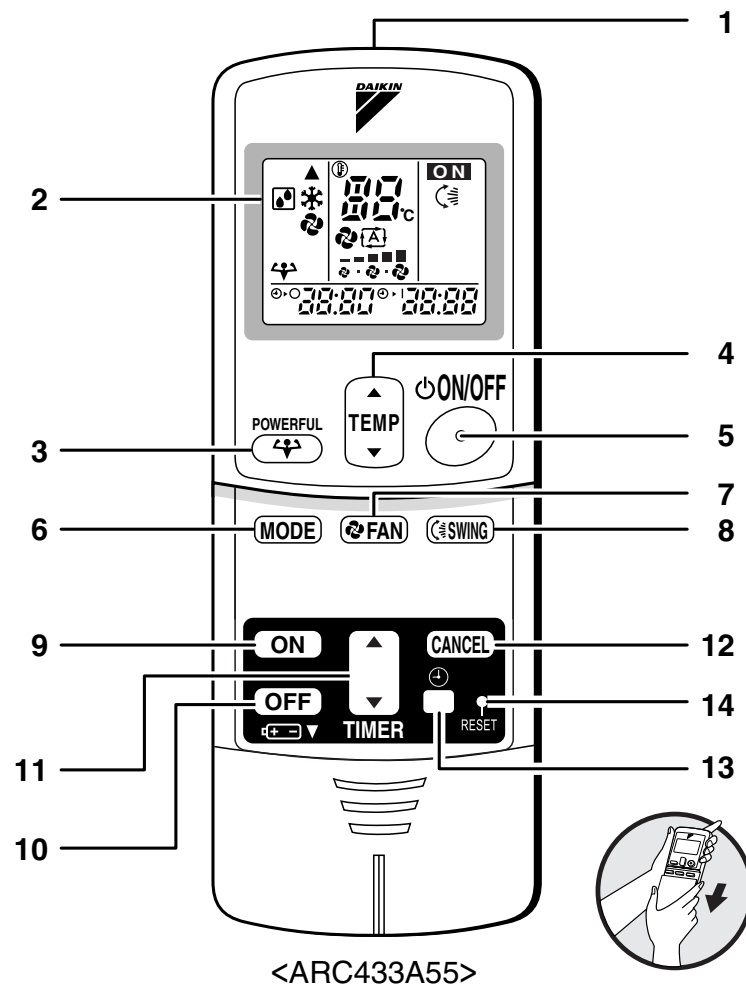
- It is inside of this cover.

20. Outside air temperature sensor:

- It senses the ambient temperature around the unit.

Appearance of the outdoor unit may differ from some models.


■ Remote Controller

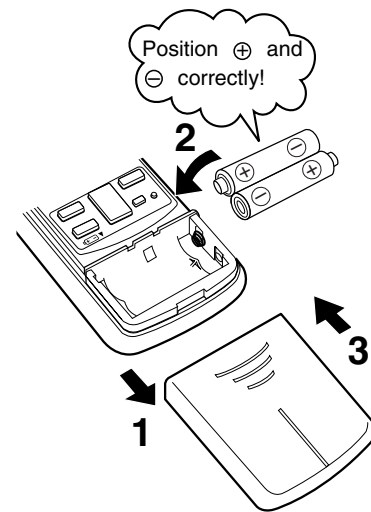


- 1. Signal transmitter:**
 - It sends signals to the indoor unit.
- 2. Display:**
 - It displays the current settings.
(In this illustration, each section is shown with all its displays ON for the purpose of explanation.)
- 3. POWERFUL button:**
 - POWERFUL operation (page 14.)
- 4. TEMPERATURE adjustment buttons:**
 - It changes the temperature setting.
- 5. ON/OFF button:**
 - Press this button once to start operation.
Press once again to stop it.
- 6. MODE selector button:**
 - It selects the operation mode.
(DRY/COOL/FAN) (page 10.)
- 7. FAN setting button:**
 - It selects the air flow rate setting.
- 8. SWING button:**
 - Adjusting the Air Flow Direction. (page 12.)
- 9. ON TIMER button:** (page 16.)
- 10. OFF TIMER button:** (page 15.)
- 11. TIMER Setting button:**
 - It changes the time setting.
- 12. TIMER CANCEL button:**
 - It cancels the timer setting.
- 13. CLOCK button:** (page 9.)
- 14. RESET button:**
 - Restart the unit if it freezes.
• Use a thin object to push.

Preparation Before Operation

■ To set the batteries

1. Press  with a finger and slide the front cover to take it off.
2. Set two dry batteries (AAA).
3. Set the front cover as before.



ATTENTION

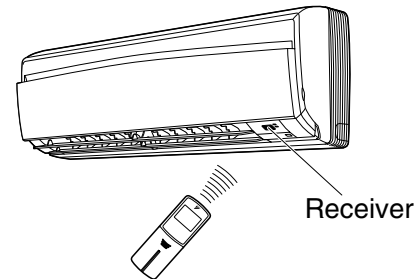
■ About batteries

- When replacing the batteries, use batteries of the same type, and replace the two old batteries together.
- When the system is not used for a long time, take the batteries out.
- We recommend replacing once a year, although if the remote controller display begins to fade or if reception deteriorates, please replace with new alkali batteries. Do not use manganese batteries.
- The attached batteries are provided for the initial use of the system.
The usable period of the batteries may be short depending on the manufactured date of the air conditioner.

Preparation Before Operation

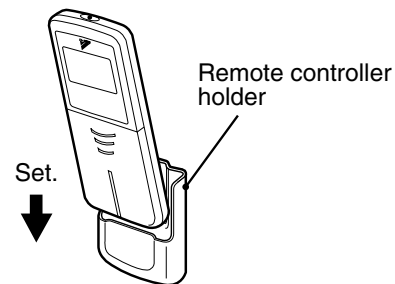
■ To operate the remote controller

- To use the remote controller, aim the transmitter at the indoor unit. If there is anything to block signals between the unit and the remote controller, such as a curtain, the unit will not operate.
- Do not drop the remote controller. Do not get it wet.
- The maximum distance for communication is about 7m.



■ To fix the remote controller holder on the wall

1. Choose a place from where the signals reach the unit.
2. Fix the holder to a wall, a pillar, etc. with the screws supplied with the holder.
3. Place the remote controller in the remote controller holder.



- To remove, pull it upwards.

ATTENTION

■ About remote controller

- Never expose the remote controller to direct sunlight.
- Dust on the signal transmitter or receiver will reduce the sensitivity. Wipe off dust with soft cloth.
- Signal communication may be disabled if an electronic-starter-type fluorescent lamp (such as inverter-type lamps) is in the room. Consult the shop if that is the case.
- If the remote control signals happen to operate another appliance, move that appliance to somewhere else, or consult the shop.

■ To set the clock

1. Press “CLOCK button”.

0:00 is displayed.

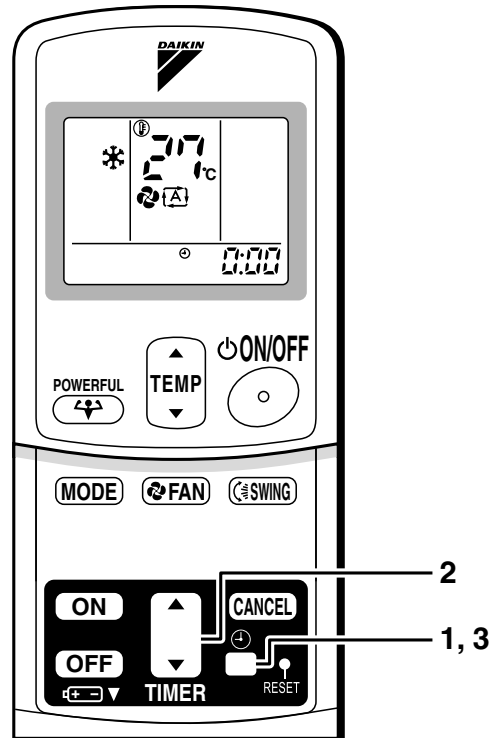
⌚ blinks.

2. Press “TIMER setting button” to set the clock to the present time.

Holding down “▲” or “▼” button rapidly increases or decreases the time display.

3. Press “CLOCK button”.

⌚ blinks.



■ Turn the breaker ON

- Turning ON the breaker opens the flap, then closes it again. (This is a normal procedure.)

NOTE

■ Tips for saving energy

- Be careful not to cool the room too much. Keeping the temperature setting at a moderate level helps save energy.
- Cover windows with a blind or a curtain. Blocking sunlight and air from outdoors increases the cooling effect.
- Clogged air filters cause inefficient operation and waste energy. Clean them once in about every two weeks.

Recommended temperature setting

For cooling: 26°C – 28°C

■ Please note

- The air conditioner always consumes 15-35 watts of electricity even while it is not operating.
- If you are not going to use the air conditioner for a long period, for example in spring or autumn, turn the breaker OFF.
- Use the air conditioner in the following conditions.

Mode	Operating conditions	If operation is continued out of this range
COOL	Outdoor temperature: 20 to 46°C Indoor temperature: 18 to 32°C Indoor humidity: 80% max.	<ul style="list-style-type: none"> • A safety device may work to stop the operation. • Condensation may occur on the indoor unit and drip.
DRY	Outdoor temperature: 20 to 46°C Indoor temperature: 18 to 32°C Indoor humidity: 80% max.	<ul style="list-style-type: none"> • A safety device may work to stop the operation. • Condensation may occur on the indoor unit and drip.

- Operation outside this humidity or temperature range may cause a safety device to disable the system.

DRY · COOL · FAN Operation



The air conditioner operates with the operation mode of your choice.

From the next time on, the air conditioner will operate with the same operation mode.

■ To start operation

1. Press “MODE selector button” and select a operation mode.

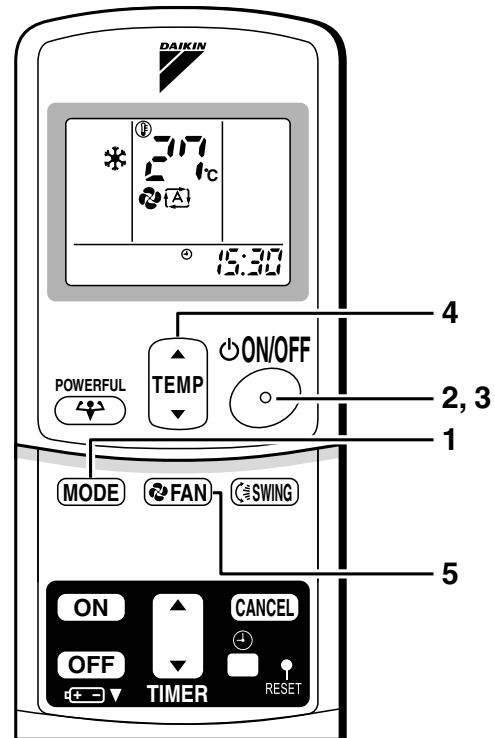
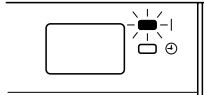
- Each pressing of the button advances the mode setting in sequence.

-  : DRY
-  : COOL
-  : FAN



2. Press “ON/OFF button” .

- The OPERATION lamp lights up.




■ To stop operation

3. Press “ON/OFF button” again.

- Then OPERATION lamp goes off.





■ To change the temperature setting

4. Press “TEMPERATURE adjustment button”.

DRY or FAN mode	COOL mode
The temperature setting is not variable.	Press “▲” to raise the temperature and press “▼” to lower the temperature.
	Set to the temperature you like. 

■ To change the air flow rate setting

5. Press “FAN setting button”.

DRY mode	COOL or FAN mode
<p>The air flow rate setting is not variable.</p>	<p>Five levels of air flow rate setting from “” to “” plus “” are available.</p> 

NOTE

■ Note on DRY operation

- The computer chip works to rid the room of humidity while maintaining the temperature as much as possible. It automatically controls temperature and fan strength, so manual adjustment of these functions is unavailable.

■ Note on air flow rate setting


- At smaller air flow rates, the cooling effect is also smaller.

Adjusting the Air Flow Direction

You can adjust the air flow direction to increase your comfort.

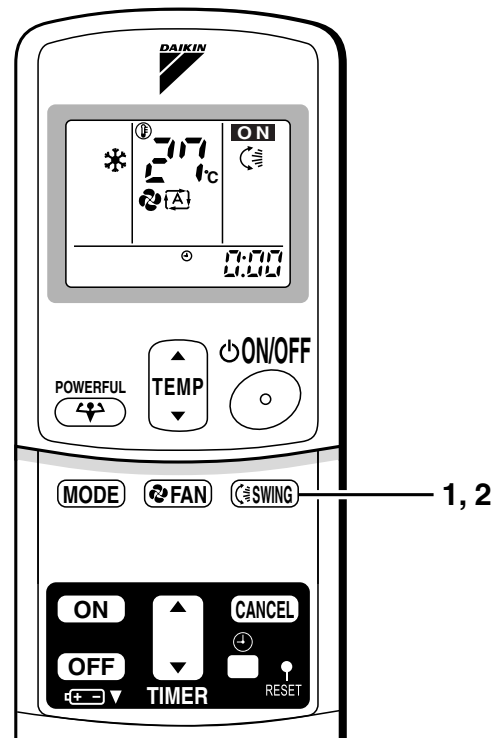
■ To adjust the horizontal blades (flaps)

1. Press “SWING button”.

 is displayed on the LCD and the flaps will begin to swing.

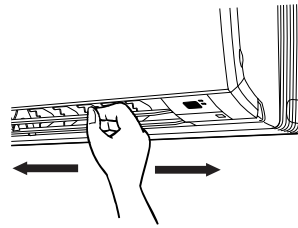
2. When the flaps have reached the desired position, press “SWING button” once more.

The display will go blank.
The flaps will stop moving.



■ To adjust the vertical blades (louvers)

Hold the knob and move the louvers.
 (You will find a knob on the left-side and the right-side blades.)



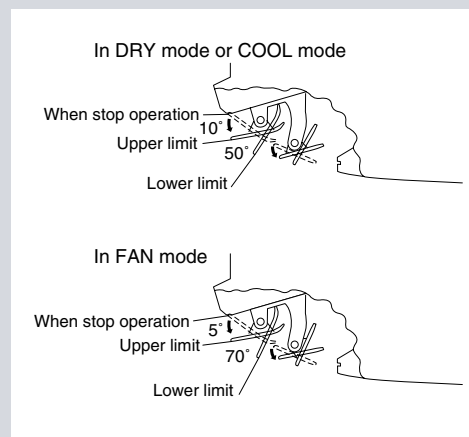
- When the unit is installed in the corner of a room, the direction of the louvers should be facing away from the wall.
 If they face the wall, the wall will block off the wind, causing the cooling efficiency to drop.

Notes on flaps and louvers angles

- When “**SWING button**” is selected, the flaps swinging range depends on the operation mode. (See the figure.)

■ ATTENTION

- Always use a remote controller to adjust the flaps angle. If you attempt to move it forcibly with hand when it is swinging, the mechanism may be broken.
- Be careful when adjusting the louvers. Inside the air outlet, a fan is rotating at a high speed.




POWERFUL Operation

POWERFUL operation quickly maximizes the cooling effect in any operation mode. You can get the maximum capacity .


■ To start POWERFUL operation

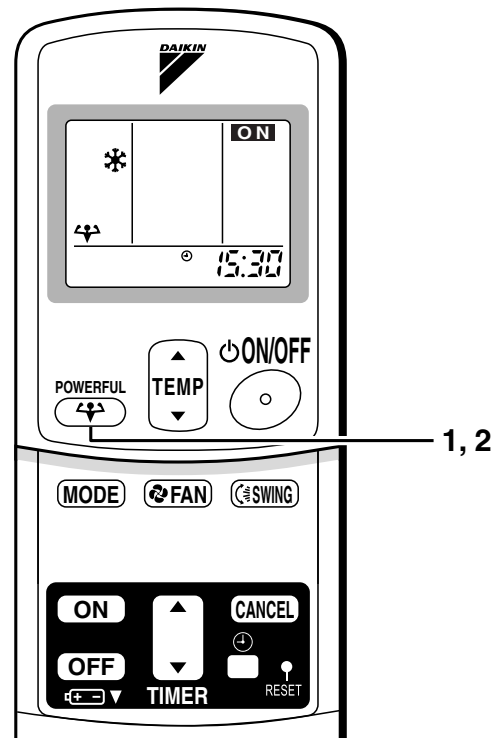
1. Press “POWERFUL button”.

- POWERFUL operation ends in 20 minutes. Then the system automatically operates again with the settings which were used before POWERFUL operation.
- When using POWERFUL operation, there are some functions which are not available.
- “” is displayed on the LCD.

■ To cancel POWERFUL operation


2. Press “POWERFUL button” again.

- “” disappears from the LCD.



NOTE

■ Notes on POWERFUL operation

- POWERFUL Operation can only be set when the unit is running. Pressing the operation stop button causes the settings to be canceled, and the “” disappears from the LCD.
- **In COOL mode**
The air flow rate is fixed to the maximum setting.
The temperature and air flow settings are not variable.
- **In DRY mode**
The temperature setting is lowered by 2.5°C and the air flow rate is slightly increased.
- **In FAN mode**
The air flow rate is fixed to the maximum setting.

TIMER Operation

Timer functions are useful for automatically switching the air conditioner on or off at night or in the morning. You can also use OFF TIMER and ON TIMER in combination.

■ To use OFF TIMER operation

- Check that the clock is correct.
If not, set the clock to the present time.
(page 9.)

1. Press “OFF TIMER button”.

0:00 is displayed.

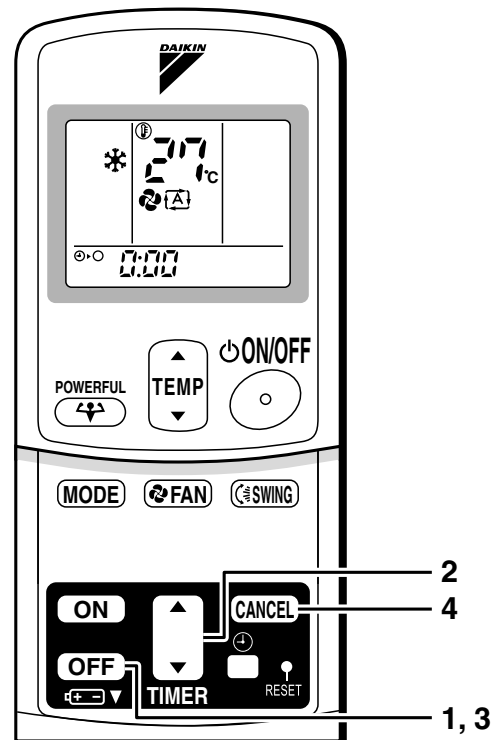
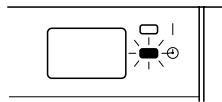
⊕-○ blinks.

2. Press “TIMER Setting button” until the time setting reaches the point you like.

- Every pressing of either button increases or decreases the time setting by 10 minutes.
Holding down either button changes the setting rapidly.

3. Press “OFF TIMER button” again.

- The TIMER lamp lights up.



■ To cancel the OFF TIMER operation

4. Press “CANCEL button”.

- The TIMER lamp goes off.

NOTE

- When TIMER is set, the present time is not displayed.
- Once you set ON, OFF TIMER, the time setting is kept in the memory. (The memory is canceled when remote controller batteries are replaced.)
- When operating the unit via the ON/OFF Timer, the actual length of operation may vary from the time entered by the user. (Maximum approx. 10 minutes)

■ NIGHT SET MODE

When the OFF TIMER is set, the air conditioner automatically adjusts the temperature setting (0.5°C up in COOL) to prevent excessive cooling for your pleasant sleep.

TIMER Operation

■ To use ON TIMER operation

- Check that the clock is correct. If not, set the clock to the present time (page 9.).

1. Press “ON TIMER button”.

6:00 is displayed.

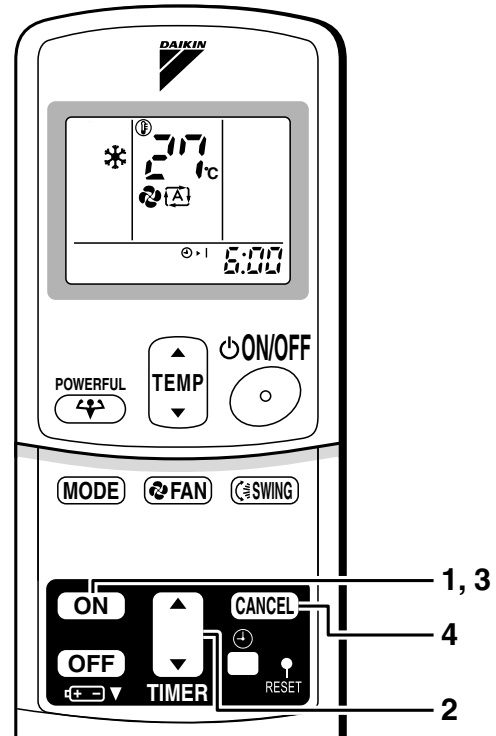
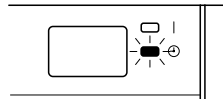
⊕-| blinks.

2. Press “TIMER Setting button” until the time setting reaches the point you like.

- Every pressing of either button increases or decreases the time setting by 10 minutes. Holding down either button changes the setting rapidly.

3. Press “ON TIMER button” again.

- The TIMER lamp lights up.



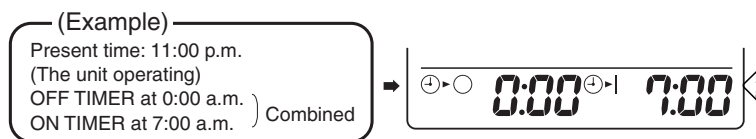
■ To cancel ON TIMER operation

4. Press “CANCEL button”.

- The TIMER lamp goes off.

■ To combine ON TIMER and OFF TIMER

- A sample setting for combining the two timers is shown below.



ATTENTION

- In the following cases, set the timer again.
 - After a breaker has turned OFF.
 - After a power failure.
 - After replacing batteries in the remote controller.

Care and Cleaning



CAUTION Before cleaning, be sure to stop the operation and turn the breaker OFF.

Units

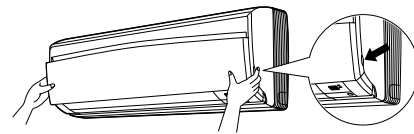
■ Indoor unit, Outdoor unit and Remote controller

1. Wipe them with dry soft cloth.

■ Front panel

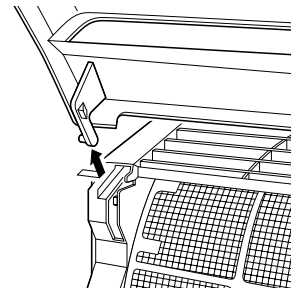
1. Open the front panel.

- Hold the panel by the tabs on the two sides and lift it until it stops with a click.



2. Remove the front panel.

- Lift the front panel up, slide it slightly to the right, and remove it from the horizontal axle.

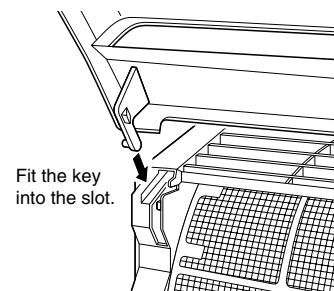


3. Clean the front panel.

- Wipe it with a soft cloth soaked in water.
- Only neutral detergent may be used.
- In case of washing the panel with water, dry it with cloth, dry it up in the shade after washing.

4. Attach the front panel.

- Set the 2 keys of the front panel into the slots and push them in all the way.
- Close the front panel slowly and push the panel at the 3 points.
(1 on each sides and 1 in the middle.)

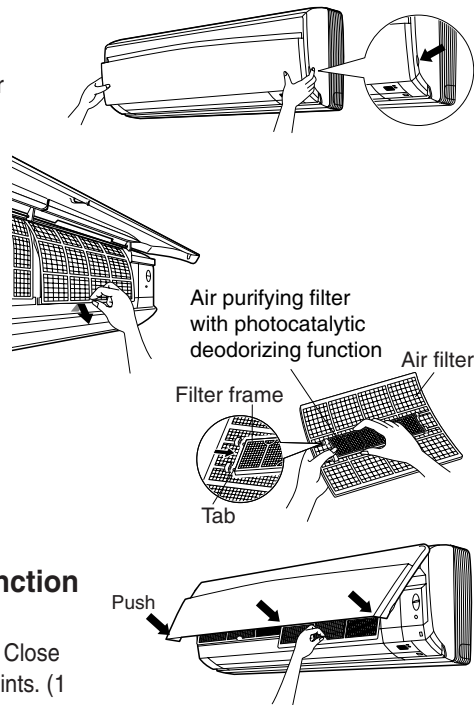


CAUTION

- Don't touch the metal parts of the indoor unit. If you touch those parts, this may cause an injury.
- When removing or attaching the front panel, use a robust and stable stool and watch your steps carefully.
- When removing or attaching the front panel, support the panel securely with hand to prevent it from falling.
- For cleaning, do not use hot water above 40°C, benzine, gasoline, thinner, nor other volatile oils, polishing compound, scrubbing brushes, nor other hand stuff.
- After cleaning, make sure that the front panel is securely fixed.

Filters

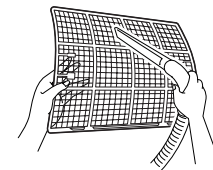
1. **Open the front panel. (page 17.)**
2. **Pull out the air filters.**
 - Push a little upwards the tab at the center of each air filter, then pull it down.
3. **Take off the air purifying filter with photocatalytic deodorizing function.**
 - Hold the recessed parts of the frame and unhook the four claws.
4. **Clean or replace each filter.**
See figure.



5. **Set the air filter and the air purifying filter with photocatalytic deodorizing function as they were and close the front panel.**
 - Insert claws of the filters into slots of the front panel. Close the front panel slowly and push the panel at the 3 points. (1 on each sides and 1 in the middle.)

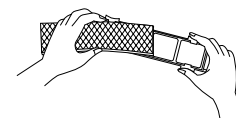
■ Air Filter

1. **Wash the air filters with water or clean them with vacuum cleaner.**
 - If the dust does not come off easily, wash them with neutral detergent thinned with lukewarm water, then dry them up in the shade.
 - It is recommended to clean the air filters every two weeks.



■ Air purifying filter with photocatalytic deodorizing function (gray)

The Air purifying filter with photocatalytic deodorizing function can be renewed by washing it with water once every 6 months. We recommend replacing it once every 3 years.



[Maintenance]

1. **Remove dust with a vacuum cleaner and wash lightly with water.**
2. **If it is very dirty, soak it for 10 to 15 minutes in water mixed with a neutral cleaning detergent.**
3. **Do not remove filter from frame when washing with water.**
4. **After washing, shake off remaining water and dry in the shade.**
5. **Since the material is made out of paper, do not wring out the filter when removing water from it.**

[Replacement]

1. **Remove the tabs on the filter frame and replace with a new filter.**
 - Dispose of the old filter as flammable waste.

NOTE

- Operation with dirty filters:
 - (1) cannot deodorize the air. (2) cannot clean the air.
 - (3) results in poor cooling. (4) may cause odour.
- To order air purifying filter with photocatalytic deodorizing function contact to the service shop there you bought the air conditioner.
- Dispose of old filters as flammable waste.

Item	Part No.
Air purifying filter with photocatalytic deodorizing function. (without frame) 1 set	KAF970A44

Check

Check that the base, stand and other fittings of the outdoor unit are not decayed or corroded.
Check that nothing blocks the air inlets and the outlets of the indoor unit and the outdoor unit.
Check that the drain comes smoothly out of the drain hose during COOL or DRY operation. <ul style="list-style-type: none"> • If no drain water is seen, water may be leaking from the indoor unit. Stop operation and consult the service shop if this is the case.

■ Before a long idle period

1. Operate the “Fan only” for several hours on a fine day to dry out the inside.
 - Press “MODE selector button” and select “Fan” operation.
 - Press “ON/OFF button” and start operation.
2. Clean the air filters and set them again.
3. Take out batteries from the remote controller.
4. Turn OFF the breaker for the room air conditioner.

Trouble Shooting

These cases are not troubles.

The following cases are not air conditioner troubles but have some reasons. You may just continue using it.

Case	Explanation
Operation does not start soon. <ul style="list-style-type: none"> When ON/OFF button was pressed soon after operation was stopped. When the mode was reselected. 	<ul style="list-style-type: none"> This is to protect the air conditioner. You should wait for about 3 minutes.
The outdoor unit emits water or steam.	<ul style="list-style-type: none"> In COOL or DRY mode <ul style="list-style-type: none"> Moisture in the air condenses into water on the cool surface of outdoor unit piping and drips.
Mists come out of the indoor unit.	<ul style="list-style-type: none"> This happens when the air in the room is cooled into mist by the cold air flow during cooling operation.
The indoor unit gives out odour.	<ul style="list-style-type: none"> This happens when smells of the room, furniture, or cigarettes are absorbed into the unit and discharged with the air flow. (If this happens, we recommend you to have the indoor unit washed by a technician. Consult the service shop where you bought the air conditioner.)
The outdoor fan rotates while the air conditioner is not in operation.	<ul style="list-style-type: none"> After operation is stopped: <ul style="list-style-type: none"> The outdoor fan continues rotating for another 60 seconds for system protection. While the air conditioner is not in operation: <ul style="list-style-type: none"> When the outdoor temperature is very high, the outdoor fan starts rotating for system protection.
The operation stopped suddenly. (OPERATION lamp is on.)	<ul style="list-style-type: none"> For system protection, the air conditioner may stop operating on a sudden large voltage fluctuation. It automatically resumes operation in about 3 minutes.

Check again.

Please check again before calling a repair person.

Case	Check
The air conditioner does not operate. (OPERATION lamp is off.)	<ul style="list-style-type: none"> • Hasn't a breaker turned OFF or a fuse blown? • Isn't it a power failure? • Are batteries set in the remote controller? • Is the timer setting correct?
Cooling effect is poor.	<ul style="list-style-type: none"> • Are the air filters clean? • Is there anything to block the air inlet or the outlet of the indoor and the outdoor units? • Is the temperature setting appropriate? • Are the windows and doors closed? • Are the air flow rate and the air direction set appropriately?
Operation stops suddenly. (OPERATION lamp flashes.)	<ul style="list-style-type: none"> • Are the air filters clean? • Is there anything to block the air inlet or the outlet of the indoor and the outdoor units? <p>Clean the air filters or take all obstacles away and turn the breaker OFF. Then turn it ON again and try operating the air conditioner with the remote controller. If the lamp still flashes, call the service shop where you bought the air conditioner.</p>
An abnormal functioning happens during operation.	<ul style="list-style-type: none"> • The air conditioner may malfunction with lightning or radio waves. Turn the breaker OFF, turn it ON again and try operating the air conditioner with the remote controller.

Call the service shop immediately.



WARNING

- When an abnormality (such as a burning smell) occurs, stop operation and turn the breaker OFF. Continued operation in an abnormal condition may result in troubles, electric shocks or fire. Consult the service shop where you bought the air conditioner.
- Do not attempt to repair or modify the air conditioner by yourself. Incorrect work may result in electric shocks or fire. Consult the service shop where you bought the air conditioner.

If one of the following symptoms takes place, call the service shop immediately.

- The power cord is abnormally hot or damaged.
- An abnormal sound is heard during operation.
- The safety breaker, a fuse, or the earth leakage breaker cuts off the operation frequently.
- A switch or a button often fails to work properly.
- There is a burning smell.
- Water leaks from the indoor unit.

Turn the breaker OFF and call the service shop.

- After a power failure
The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

- Lightning
If lightning may strike the neighbouring area, stop operation and turn the breaker OFF for system protection.

We recommend periodical maintenance.

In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a specialist aside from regular cleaning by the user. For specialist maintenance, contact the service shop where you bought the air conditioner.

The maintenance cost must be born by the user.

14. Optional Accessories

14.1 Option List

	Option Name	Kit Name	Applicable Model
1	Centralized control board-up to 5 rooms ★1	KRC72	Indoor Unit
2	Wiring adaptor for time clock/remote control ★2 (Normal open pulse contact / Normal open contact)	KRP413A1S	Indoor Unit
3	Air Purifying Filter with Photocatalytic Deodorizing Function	KAF970A44	Indoor Unit
4	Remote controller loss prevention with the chain	KKF917A4	Indoor Unit
5	Drain Plug	KKP937A4	Outdoor Unit
6	Air Direction Adjustment Grille	KPW937A4	Outdoor Unit



- Notes:**
- ★1 Wiring adaptor is also required for each indoor unit.
 - ★2 Wiring adaptor ; supplied by DAIKIN. Time clock and other devices ; obtained locally.

14.2 Installation Manual




14.2.1 KRP413A1S

Safety Precautions

- Read these safety precautions carefully before installing the unit, and be sure to install the unit properly.
- This manual classifies precautions to the user into the following two categories. These warnings and cautions are for your safety. Follow them.

 WARNING	Faulty installation can result in death or serious injury.
 CAUTION	Faulty installation can result in serious injury, damage to property, or other serious consequences.

- Below is a key to symbols used in this manual.

	Be sure to follow instructions.
	Be sure to perform grounding work.
	Never attempt.

- After installation is complete, test the unit to confirm that it is working properly, and instruct the owner its proper use.

WARNING

- Installation should be left to the dealer from whom you purchased the unit, or another qualified professionals.
- Install the unit securely according to the installation manual. Faulty installation may lead to electric shock or fire.
- Be sure to use the supplied or specified parts. Using other parts may lead to electric shock or fire.
- Install the unit securely in a location that will support its weight. If installed in a poor location or improperly installed, the unit may not work as intended.
- For electrical work, follow local electric standards and the installation manual. Faulty installation may lead to fire or electric shock.
- Do not bundle the power cord, or attempt to extend it by splicing it with another cord or by using an extension cord. Do not place any other load on the power circuit used for the unit. Improper wiring may lead to electric shock, heat generation or fire.
- Use dedicated wiring for all electrical connections, and be sure to arrange the wiring so that force applied to the wiring will not damage the terminals. Poor wiring or installation may cause electric shock, heat generation or fire.

CAUTION

- Before installation, unplug the air conditioner to ensure safety. Failure to do so may cause electric shock.
- Static electricity may damage electric components. Before connecting cables and communication lines, and operating the switches, be sure to discharge any electrical charge from your body (by, for example, touching the earth line)
- Do not install the unit in a location where it may be exposed to flammable gases. If gas leaks and build up around the unit, it may catch fire.
- Do not place the relay harness close to the power cord, inter-unit cable, or pipes which generate noise. Treat the harness with care.

1. Functions and Features

- On/Off setting
- Switching between Instantaneous Contact/Normal Contact
- Connection with five-room central controller (KRC72 for oversea model)
- Connection with fan coil remote controller
- Automatic reset after power failure
- Output of normal operation signals/alert signals

2. Field Wiring

For interconnecting wiring, use Daikin KDC100A12 cable (not supplied) or other similar cable. The cable should have the specifications shown below.

■ Optional cable KDC100A12 (without connectors)

Specifications: 0.2 mm² × 4 core (sheathed)
 Outer diameter: φ5.3
 Length: 100 m
 Colour: Grey

■ Other cable (commercially available)

Item	Outer dia.	Remarks
Cable for instrumentation (IPVV) 0.3 mm ² × 4-core	7.2 mm	Hard sheath
Microphone cord (MVVS) 0.3 mm ² × 4-core	8.0 mm	Shielded
Microphone cord (MVVS) 0.2 mm ² × 4-core	6.5 mm	
Microphone cord (MVVS) 0.15 mm ² × 4-core	4.8 mm	
Intercom cable 0.65 mm ² dia. × 4-core		
PVC jumper wire (TJVC) (from 0.5 mm dia. × 4 pcs.)	—	Not sheathed

Note 1: Keep any wiring for the control unit away from the power cord to prevent electrical noise.

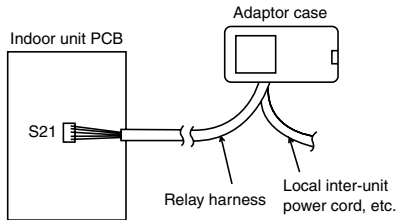
Note 2: Do not use cables shown above for power cord, inter-unit cord/cable or power cord for lamps.

Installation

This product is available in two types. The **KRP413A1S** is for installation in a case independent of the indoor unit, and the **KRP413A1** is for installation within the indoor unit.

1. KRP413A1S

1 Installation diagram



2 Components

<p>① Adaptor case assy (Adaptor (PCB) is attached in the adaptor case.)</p>	<p>② Relay harness (approx. 0.8 m)</p>
<p>③ Accessories</p> <ul style="list-style-type: none"> • Tie-wrap (4 pcs.) • Velcro for attaching to the indoor unit (2 sets) • Screws for attaching the adaptor case (4 pcs.) • Screws for attaching to the wall (3 pcs.) 	
<p>④ Installation manual</p>	

2. KRP413A1

For this type, install the adaptor PCB within the indoor unit. The method of installation and connection vary depending on the model of the air conditioner. See your air conditioner installation manual for details.

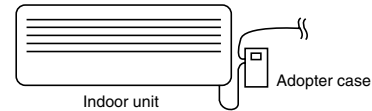
1 Components

<p>① Adaptor PCB</p>	<p>② Relay harness (approx. 0.25 m)</p>
<p>③ Installation manual</p>	

3. Attaching Adaptor Case Assy (for KRP413A1S)

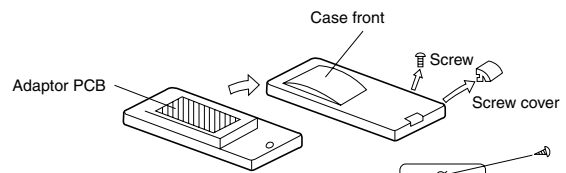
1 Using the screws (to mount on a wall, etc.)

- Use the 3 supplied screws to attach the case assy .



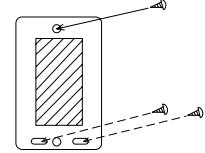
Install the adaptor case assy as close to the indoor unit as possible.

① Removing case front

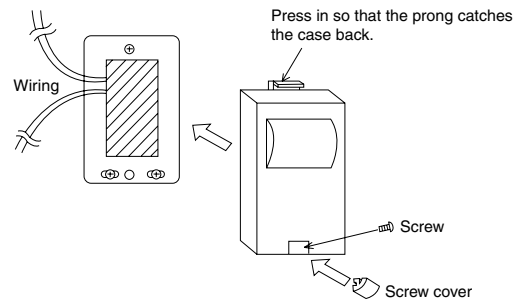


Remove the screw cover, one of the screws and then the case front.

② Attach the case back to the surface by tightening the screws through the screw holes (one round hole, two long holes).



③ After connecting the cables (refer to the following sections), replace the case front. Be careful not to damage the harness in the case.



2 Using Velcro (to attach on the indoor unit)

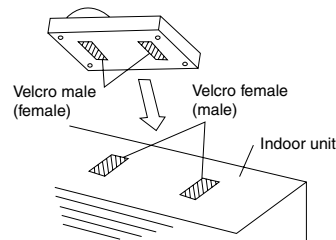
- Attach the adaptor case with the supplied Velcro.

① Remove the case front (as for mounting on a wall).

② After connecting the cables (see the following sections), replace the case front. It can be screwed to the case back from the rear with the four supplied screws.

Be careful not to damage the harness in the case.

③ Stick one end of the Velcro to the rear side of the case back, and stick the other end to the indoor unit with the same space between them.



To prevent the adaptor case assy from falling, do not use the Velcro for attaching it to a wall or other surface.

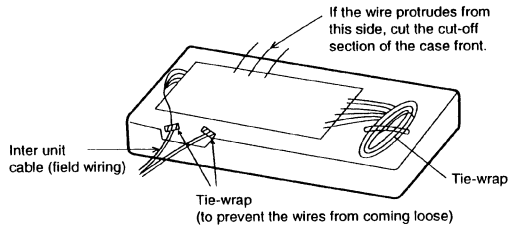
Wiring

1. Wiring

- ① Connect one end of the relay harness to connector S21 of the PCB in the indoor unit.
- ② Connect the other end of the relay harness to connector S6 of the adaptor PCB.
- ③ Connect field wiring according to the functions assigned to each connection terminal of the adaptor PCB.
- ④ Secure all wires.

1 Securing wires in the adaptor case assy (for KRP413A1S)

- Fasten with a tie-wrap so that wires will not come loose even if pulled.



2 Securing wires in the indoor unit (for KRP413A1)

- The method for securing wire varies depending on the model of the air conditioner. See your air conditioner installation manual for details.

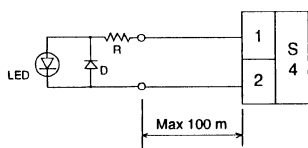
2. Automatic Reset After Power Failure

- This PCB stores the following data in the event of a power failure (common features).
 - ① On/Off (see Note 1)
 - ② Operation modes
 - ③ Temperature setting
 - ④ Air flow rate
 - ⑤ On/Off status of remote controller
 (Note 1 When SW1-2 is in Off mode, the unit will not be activated.)

3. Monitor Signal Output (normal operation and malfunction)

- Maximum length of the wiring is 100 m.

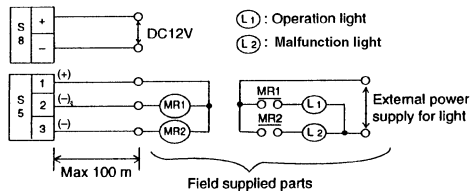
1 Monitor signal output for LED



■ Locally procured parts

Item	Manufacturer	Type
LED	Toshiba	TLG208 (green) TLR208 (red)
D	Rohm	1S2473
R		510 ohm 1/4W

2 Monitor signal output (normal operation and malfunction) using external relay contacts



■ Field procured parts (Recommended external relay contacts)

Manufacturer	Type	Coil rated voltage	Coil resistance
Omron	MY relay	12 V DC	160 ohm ± 10%
Matsushita	HC relay	12 V DC	160 ohm ± 10%

4. Connection with Remote Controller

Example connections with three kinds of remote controllers are shown below.

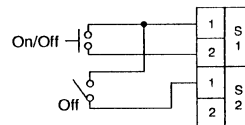
Note: These connections cannot be used in combination.

1 Generic remote controller

- Set SW1-1 to Off and select Operation Mode 1.

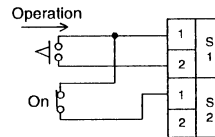


<Instantaneous Contact>



- The remote controller most recently used (local or air conditioner) takes precedence.
- Use a remote controller with a pulse width of 100 msec or more.

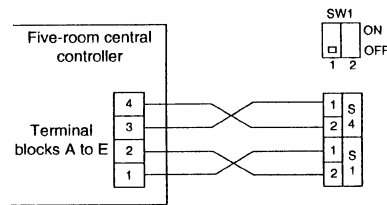
<Normal Contact>



- Power On/Off cannot be controlled from the unit's remote controller.
- When power is restored after a power failure in this mode, On or Off is determined according to the current settings of the remote controller.

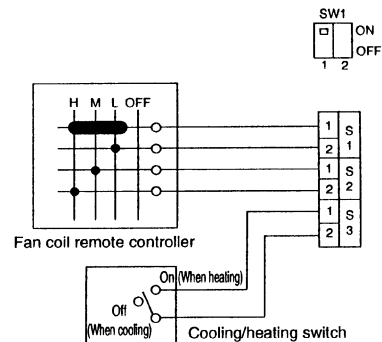
2 Five-room central controller (KRC72)

- Set SW1-1 to Off and select Operation Mode 1.
- The remote controller most recently used takes precedence.



3 Fan coil remote controller

- Set SW1-1 to On and select Operation Mode 2.
- Most settings (power On/Off, air flow rate, mode change) cannot be made using the air conditioner's remote controller.
- When power is restored after a power failure in this mode, On or Off is determined according to the current settings of the remote controller.
- When the Cooling /Heating mode is changed, use the air conditioner's remote controller to adjust the temperature.

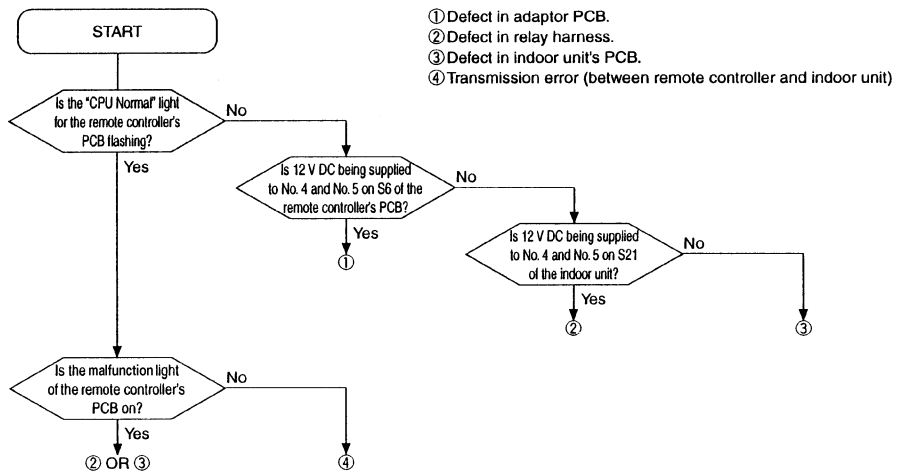


Test Operation and Confirmation

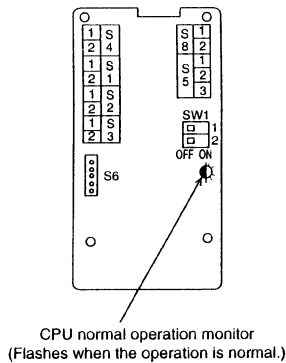
1 When the System is Not Working

- Is the air conditioner working properly?
- Are the connectors of the relay harness properly connected?
- Are the remote controller and field wiring properly connected?
- Are all switch settings correct?
- If there is nothing apparently wrong, conduct a diagnostic check using the following procedure.

■ Diagnostic check



2. Switch Settings and Connection Terminals



SW1-1	Selecting the operation mode	OFF	Operation mode 1 (Used with the exception of fan coil remote controller settings)			
		ON	Operation mode 2 (Used with fan coil remote controller settings)			
SW1-2	Selecting On/Off when power is restored after a power failure	OFF	Always Off			
		ON	Off if operation was in Off mode before power failure; On if operation was in On mode before power failure			
S1 S2 S3	SW1-1: OFF (Operation mode 1)			Instantaneous contact	Normal contact	
		S1 (1) - S2 (1)	OPEN	CLOSE		
		S1 (1) - S1 (2)	Pulse input On/Off switching		OPEN, Not activated	CLOSE, Activated
		S2 (2), S3	Not used			
	SW1-1: ON (Operation mode 2)			Not activated		
		S1, S2 OPEN	Not activated			
		S1 (1) - S1 (2) CLOSE	On, airflow: L tap			
		S1 (1) - S2 (1) CLOSE	On, airflow: M tap			
		S1 (1) - S2 (2) CLOSE	On, airflow: H tap			
		S3 (With the remote controller only)	OPEN, Cooling			
			CLOSE, Heating			
S4	(1) - (2)	Voltage on (DC12 V), normal operation light output				
S5	(1) - (2)	Normal operation light output (power for light required)				
	(1) - (3)	Malfunction light output (power for light required)				
S6 connector		Connect with connector S21 on the PCB of the indoor unit				
S8	(+) - (-)	Relay DC 12 V power supply terminal (Field supplied parts)				

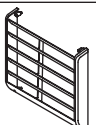

2P031616A

14.2.2 KPW937A4

■ Before Installation

Checking the parts

Check the following parts

Name	Louver	Installation manual
Shape	 With 4 screws	
Quantity	1 piece	1 piece

■ Installation Procedure

Selection of Installation Location

Use when installing in a location that meets the following conditions.

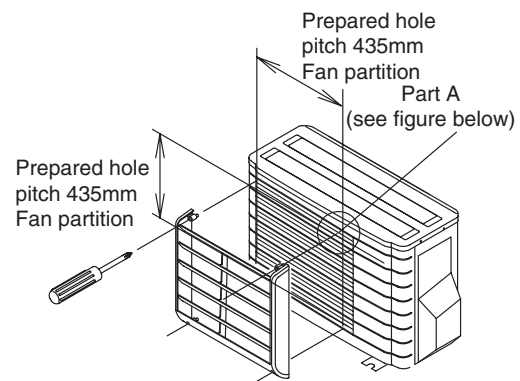
- When installing near the border to a neighbor's house
- If exhaust blows directly on passers-by because outdoor unit is installed facing a road.
- Changing the fan direction of the outdoor unit to prevent it blowing directly on shrubbery, etc.

Installation of Louver

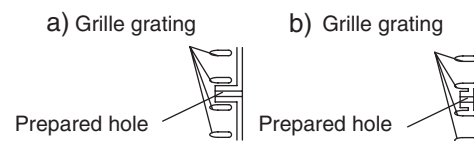
- Installation is possible in the four directions: upward, downward, rightward, and leftward.
- The installation screws are attached to the louver.
- First temporarily attach the louver with 4 screws, then check that the angle is correct, and finally tighten the screws fully.

⚠ CAUTION

1. Install so that a short circuit is prevented.
2. For the use in snowy regions, avoid installation with the air outlet facing upward. Install so that the air outlet faces leftward, rightward, or downward. Snow accumulates in the air outlet of the outdoor unit, causing malfunction of the main body of the outdoor unit.
3. Be advised that if the fan direction is up, dead leaves and other foreign matter easily accumulates in the exhaust vent.



The prepared hole is in between the grating of the grille. Part A (prepared hole) cross section (the shape of either a or b)



4P104499-1

Warning



- Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

For any inquiries, contact your local distributor.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.
2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and choose an outdoor unit with anti-corrosion treatment.



The air conditioners manufactured by Daikin Industries have received **ISO 9001** certification for quality assurance.

Certificate Number. JMI-0107
JQA-0495
JQA-1452



All Daikin Industries locations and subsidiaries in Japan have received environmental management system standard **ISO 14001** certification.

Daikin Industries, Ltd.
Domestic Group
Certificate Number. EC99J2044

About ISO 14001

ISO 14001 is the standard defined by the International Organization for Standardization (ISO) relating to environmental management systems. Our group has been acknowledged by an internationally accredited compliance organisation as having an appropriate programme of environmental protection procedures and activities to meet the requirements of ISO 14001.

Dealer

DAIKIN INDUSTRIES, LTD.

Head Office:
Umeda Center Bldg., 4-12, Nakazaki-Nishi
2-chome, Kita-ku, Osaka, 530-8323 Japan

Tokyo Office:
JR Shinagawa East Bldg., 18-1, Konan
2-chome, Minato-ku, Tokyo, 108-0075 Japan
<http://www.daikin.com/global/>

©All rights reserved